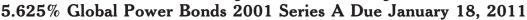
# U.S.\$1,000,000,000

# Tennessee Valley Authority





Interest Payable January 18 and July 18

The 5.625% Global Power Bonds 2001 Series A Due January 18, 2011 (the "Bonds") of the Tennessee Valley Authority ("TVA") will not be subject to redemption prior to maturity. The Bonds will be issued in minimum denominations of U.S.\$1,000 and integral multiples thereof.

The Bonds will be issued, maintained and transferred only on the book-entry system of the U.S. Federal Reserve Banks, as described herein. Transactions in the Bonds will be cleared and settled in book-entry form by Euromarket participants through the facilities of Clearstream, Luxembourg (as defined herein) and Euroclear (as defined herein). See "Clearance and Settlement." The Bonds will not be exchangeable for definitive securities.

The Bonds may be separated ("stripped") into their separate Interest and Principal Components (as defined herein) and maintained as such on the book-entry records of the U.S. Federal Reserve Banks. The components of each stripped Bond are: each future interest payment (each an "Interest Component") and the principal payment (the "Principal Component" and, together with the Interest Components, hereinafter collectively referred to as the "Strips" or "Interest and Principal Components"). See "Description of Bonds" — "Stripping" and "United States Tax Matters."

Application has been made to list the Bonds on the Luxembourg Stock Exchange and the New York Stock Exchange (collectively, the "Stock Exchanges"). Application also has been made to list the Strips on the Luxembourg Stock Exchange.

The Bonds and Strips are considered to be obligations in registered form for United States federal tax purposes. Beneficial owners of the Bonds or Strips that are not United States persons must certify that they are non-United States persons in order to receive payments on the Bonds or Strips free of United States withholding tax. See "United States Tax Matters." TVA will not pay additional interest or other amounts in respect of any withholding or other tax that may be imposed by any jurisdiction on payments on the Bonds or Strips as a result of a change in law or otherwise.

TVA is a wholly owned corporate agency and instrumentality of the United States of America. Principal and interest will be payable solely from TVA's Net Power Proceeds (as defined herein).

The Bonds will not be obligations of, nor will payment of the principal thereof or the interest thereon be guaranteed by, the United States of America. The Bonds are not required to be registered under the U.S. Securities Act of 1933. Accordingly, no Registration Statement has been filed with the U.S. Securities and Exchange Commission. TVA is not subject to the periodic reporting requirements of the U.S. Securities Exchange Act of 1934.

	Price to Public(1)	Discount to Managers	Net Proceeds to TVA(1)(2)
Per Bond	99.329%	.300%	99.029%
Total	U.S.\$993,290,000	U.S.\$3,000,000	U.S.\$990,290,000

- (1) Plus accrued interest, if any, from January 18, 2001, to date of delivery.
- (2) Before deducting expenses payable by TVA estimated at U.S.\$250,000.

The Bonds offered by this Offering Circular are offered by the Managers (as defined herein) subject to prior sale, withdrawal, cancellation or modification of the offer without notice, to delivery to and acceptance by the Managers and to certain further conditions. It is expected that delivery of the Bonds, in book-entry form, will be made through the book-entry system of the U.S. Federal Reserve Banks on or about January 18, 2001, against payment therefor in immediately available funds.

Merrill Lynch & Co.

Morgan Stanley Dean Witter

# G L O B A L I M P A C T

"[TVA has]... a reputation of being among the most innovative of the U.S.

**Agency borrowers**"

-International Financing Review, March 1996 TVA entered the global debt markets in 1995 to offer unique investment opportunities that provide exceptional value for both the investor and TVA. TVA attracts global investors offering debt issues with a variety of maturities and currencies—including the Deutsche Mark and British pound sterling—and solid trading performance in secondary markets.

Since mid-1995, TVA has issued eight global bonds and reopened two for a total of \$10.2 billion. These global bonds represent half of TVA's total long-term public debt offerings since 1995, and more than one-third of TVA's total debt portfolio. More than 25,000 investors have purchased TVA's global bonds, including institutional investors such as money managers, banks and trusts, insurance companies and pension fund managers, as well as individual investors. TVA's global investors are concentrated in Europe and Asia.



Area Served by the Tennessee Valley Authority





# PROVIDING POWER IN THE PUBLIC INTEREST

TVA is poised to remain a competitive player in what is predicted to be a new, highly competitive



electric utility
market. With
one of the
largest
generating

and transmission systems in the
United States, TVA's power
operations form a vital part of the
nation's energy infrastructure.





TVA is more than a power company. In the nearly seven decades since its creation, TVA has been guided by the higher purpose of serving the public interest and promoting economic growth in the Tennessee Valley. TVA is a key partner in help-

ing generate prosperity for the nearly eight million people living in the Tennessee Valley. TVA strengthens the regional economy by promoting economic development, supplying low-cost, reliable power and supporting a thriving river system. As the



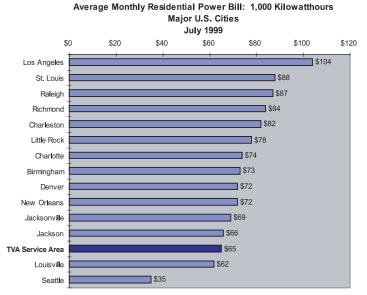
manager of the nation's fifth largest river system, TVA seeks a balance among the public's competing demands for recreation, water quality, water supply and other uses of this resource while operating its dams and reservoirs primarily for navigation and flood control and, to the extent consistent with these purposes, for hydroelectric generation. Today, TVA is recognized around the world as an expert in power production, flood control, river navigation and environmental quality.

Because TVA's core product is so essential to so many, the reliability and availability of TVA's power plants and transmission system is a top priority. Through meticulous attention to maintenance and modernization, aggressive pursuit of greater productivity and optimizing the use of assets, TVA is able to ensure its plants are ready when they are needed most. Commitment to reliability and availability has paid off consistently over the last 67 years, especially in the summer of 1999 when TVA set a new all-time peak of 28,295 megawatts.

Beyond assuring that TVA power is reliable and available, TVA has an obligation to ensure that its power is an affordable, competitive value. Consistent with its federal charter, TVA generates and transmits an ample supply of power to the people of the Valley at "rates as low as are feasible." As a result, TVA's energy prices are

among the lowest in the nation. In addition, TVA's power program is 100 percent self-supporting from power revenues and proceeds from the issuance of debt.

Retaining its competitive position is important to TVA's success in a restructured environment. TVA recognized over a decade ago that the electric utility industry would undergo significant changes and has taken the necessary steps to prepare for an increasingly competitive environment.



In 1988 TVA began an aggressive program to reduce costs and hold prices steady. In addition, TVA unveiled an ambitious 10-Year Business Plan in July 1997 designed to ensure that TVA's price of power remains competitive in a restructured environment.

TVA is deeply committed to its role of sustaining and improving the quality of life in the Tennessee Valley. TVA will continue to support and enhance the economic prosperity of this region by supplying low-cost, reliable power, supporting a thriving river system and stimulating economic growth.



MERRILL LYNCH, PIERCE, FENNER & SMITH INCORPORATED MAY ENGAGE IN TRANSACTIONS THAT STABILIZE, MAINTAIN, OR OTHERWISE AFFECT THE PRICE OF THE BONDS. SPECIFICALLY, MERRILL LYNCH, PIERCE, FENNER & SMITH INCORPORATED MAY OVERALLOT IN CONNECTION WITH THE OFFERING, AND MAY BID FOR, AND PURCHASE, BONDS IN THE OPEN MARKET AND MAY IMPOSE PENALTY BIDS. SUCH TRANSACTIONS MAY BE EFFECTED IN AN OVER-THE-COUNTER MARKET OR OTHERWISE.

Neither of the Stock Exchanges takes any responsibility for the correctness of any statements made or opinions expressed in this Offering Circular or any other document incorporated by reference herein or makes any representation as to its accuracy or completeness. Each of the Stock Exchanges expressly disclaims any liability whatsoever for any loss howsoever arising from or in reliance upon the whole or any part of this Offering Circular or any other document incorporated by reference herein. Neither the quotations of, or permission to deal in, the Bonds nor an admission to the official lists of either of the Stock Exchanges should be taken as an indication of the merits of TVA or the Bonds.

No dealer, salesperson or any other person has been authorized by TVA to give any information or to make any representations on behalf of TVA other than those contained in this Offering Circular, the current Information Statement (as defined herein), or any supplement to any of the foregoing prepared by TVA for use in connection with the offer made by this Offering Circular and, if given or made, such information or representations must not be relied upon as having been authorized by TVA. Neither the delivery of this Offering Circular or the current Information Statement nor any sale of Bonds described herein shall under any circumstances create an implication that the information provided herein is correct at any time subsequent to its date, and TVA assumes no duty to update this Offering Circular or the current Information Statement except as it deems appropriate. This Offering Circular does not constitute an offer to sell or a solicitation of an offer to buy the Bonds described herein in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

The distribution of this Offering Circular and the offering of the Bonds may, in certain jurisdictions, be restricted by law. Persons into whose possession this Offering Circular comes are required by TVA and the Managers to inform themselves of and observe all such restrictions.

This Offering Circular should be read in conjunction with TVA's current Information Statement, dated February 4, 2000 (the "current Information Statement"), which is attached hereto and incorporated herein. Any statement contained in the current Information Statement shall be deemed to be modified or superseded for all purposes of the current Information Statement and this Offering Circular to the extent that a statement contained in this Offering Circular modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified, to constitute a part of the current Information Statement. The audited financial statements contained in this Offering Circular at or for the period ending September 30, 2000, including the notes thereto (the "2000 Financial Statements"), and the 2000 Management's Discussion and Analysis of Financial Condition and Results of Operations section of this Offering Circular (together with the 2000 Financial Statements, the "Dated Information") are current only as of September 30, 2000. Any statement contained in the Dated Information shall be deemed to be modified or superseded for all purposes of the Dated Information and this Offering Circular to the extent that a statement contained in any section of this Offering Circular outside of the Dated Information modifies or supersedes such statement in the Dated Information. Any statement so modified or superseded shall not be deemed, except as so modified, to constitute a part of this Offering Circular. Additional copies of this Offering Circular and of the current Information Statement may be obtained (free of charge) upon written request directed to Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, Tennessee 37902-1401, Attention: Senior Vice President and Treasurer, or by calling (865) 632-3366 in the United States. Copies may also be obtained (free of charge) from Kredietbank S.A. Luxembourgeoise (the "Special Agent" or "Listing Agent"), 43 Boulevard Royal L-2955, Luxembourg, R.C. Luxembourg B6395. The then-current Information Statement and other information concerning TVA may be inspected at the offices of the New York Stock Exchange, 20 Broad Street, New York, New York 10005.

This Offering Circular has been prepared by TVA solely for use in connection with the offering of the Bonds described herein and for purposes of listing the Bonds on the Stock Exchanges. TVA has taken reasonable care to ensure that the information contained in this Offering Circular is true and accurate in all material respects and that there are no material facts the omission of which would make misleading any statements herein, in light of the circumstances under which such statements are made. TVA accepts responsibility accordingly.

In this Offering Circular and the current Information Statement, references to "U.S. dollars," "U.S.\$," "dollars" and "\$" are to United States dollars.

#### FORWARD-LOOKING STATEMENTS

This Offering Circular, the current Information Statement, and the Dated Information contain forward-looking statements relating to future events and future performance. Any statements regarding expectations, beliefs, plans, projections, estimates, objectives, intentions or assumptions or otherwise relating to future events or performance may be forward-looking. Some examples of forward-looking statements include statements regarding TVA's projections of future power and energy requirements, future costs related to environmental compliance, and targets for TVA's future competitive position. Although TVA believes that the assumptions underlying the forward-looking statements in this Offering Circular, the current Information Statement, and the Dated Information are reasonable, TVA does not guarantee the accuracy of these statements. Numerous factors could cause actual results to differ materially from those in the forward-looking statements. These factors include, among other things, new laws, regulations and administrative orders, especially those related to the restructuring of the electric power industry and various environmental matters; increased competition among electric utilities; legal and administrative proceedings affecting TVA; the financial environment; performance of TVA's generating facilities; fuel prices; the demand for electricity; weather conditions; changes in accounting standards; and unforeseeable events.

### TABLE OF CONTENTS

Offering Circular			
	Page		
Forward-Looking Statements	C-4		
Summary of Offering	C-6		
Tennessee Valley Authority	C-9		
Use of Proceeds	C-9		
Recent Developments	C-10		
2000 Management's Discussion and Analysis of Financial Condition and Results of Operations	C-15		
2000 Financial Statements	C-22		
Description of Bonds	C-43		
Clearance and Settlement	C-47		
Legality of Investment in the United States	C-48		
United States Tax Matters	C-49		
Subscription and Selling	C-57		
General Information	C-58		
Validity of Bonds	C-59		
Information Statement			
Tennessee Valley Authority	1		
Selected Financial Data	2		
Comparative Five-Year Data	3		
Management's Discussion and Analysis of Financial Condition and Results of Operations	4		
The Area Supplied by TVA	7		
Rates, Customers and Market	7		
Competition	9		
Power and Energy Requirements	10		
Power System	10		
Electricity Futures Contracts	12		
Nuclear Power Program	12		
Environmental Matters	16		
Insurance	19		
Pending Litigation	19		
Management	19		
Employees	20		
Certain Provisions of the Tennessee Valley Authority Act	21		

The Basic Resolution; Power Bonds, Discount Notes and Other Indebtedness ......

Independent Accountants .....

Report of Management ..... F-20

22

28 F-1

F-19

### SUMMARY OF OFFERING

The information below is qualified in its entirety by the detailed information appearing in TVA's current Information Statement (and any supplement thereto) and elsewhere in this Offering Circular. Capitalized terms used and not defined herein have the meanings defined in such Information Statement and elsewhere in this Offering Circular.

Issuer	TVA is a wholly owned corporate agency and instrumentality of the United States of America established by the Tennessee Valley Authority Act of 1933, as amended.
Capitalization	Total capitalization of TVA at September 30, 2000, as adjusted for the Bonds offered hereby, would have been U.S.\$30,095 million. There has been no material change in TVA's capitalization since September 30, 2000.
Securities Offered	U.S.\$1,000,000,000 aggregate principal amount of 5.625% Global Power Bonds 2001 Series A Due January 18, 2011 (the "Bonds").
Interest	The Bonds will bear interest from January 18, 2001, at the annual rate set forth on the cover page hereof, payable semiannually in arrear on each January 18 and July 18, commencing July 18, 2001.
Redemption	The Bonds will not be subject to redemption prior to maturity.
Fiscal Agent	U.S. Federal Reserve Banks
Listing	Application has been made to list the Bonds on the Luxembourg Stock Exchange and the New York Stock Exchange. Application also has been made to list the Strips on the Luxembourg Stock Exchange.
Use of Proceeds	The net proceeds received by TVA from the sale of the Bonds will be used to retire existing debt.
Source of Payment	The interest and principal on the Bonds are payable solely from Net Power Proceeds and are not obligations of, or guaranteed by, the United States of America. See "The Basic Resolution; Power Bonds, Discount Notes and Other Indebtedness" in the current Information Statement.
Form and Denomination of Bonds	The Bonds will be issued and maintained and may be transferred by Holders (as defined herein) only on the book-entry system of the U.S. Federal Reserve Banks. See "Description of Bonds"— "Book-Entry System." The Bonds will not be exchangeable for definitive securities. The Bonds will be issued and must be maintained and transferred in minimum denominations of U.S.\$1,000 and integral multiples thereof.
Stripping	The Bonds may be stripped into their separate Interest and Principal Components and maintained as such on the book-entry records of the U.S. Federal Reserve Banks. The components of each stripped Bond are: each future interest payment and the principal payment. Each Interest Component and the Principal Component will have an identifying designation and CUSIP number. See "Description of Bonds" — "Stripping" and "United States Tax Matters," and see "The Basic Resolution; Power Bonds, Discount Notes and Other Indebtedness" — "Stripping" in the current Information Statement.
Delivery of Strips	The Managers immediately upon their acceptance of the Bonds may, but are not obligated to, strip some or all of the Bonds and deliver

Strips rather than Bonds to investors purchasing Strips. Sales of any such Strips would be at negotiated prices. See "Subscription and Selling." Clearance and Settlement . . . . . . . . The Bonds must be held in accounts with institutions having access in the United States to the book-entry system of the U.S. Federal Reserve Banks. Transactions in the Bonds will be cleared and settled by Euromarket participants through the facilities of Euroclear and Clearstream, Luxembourg. See "Clearance and Settlement." Legality of Investment in the United States ..... Each person or entity is advised to consult with its own counsel with respect to the legality of investment in the Bonds or in Strips, which could be subject to restrictions or requirements that do not apply to Power Bonds held in their fully constituted form. The following generally describes the legality of investment in the United States in TVA Power Bonds in their fully constituted form. Power Bonds are: • acceptable as security for all fiduciary, trust and public funds, the investment or deposit of which shall be under the authority or control of any officer or agency of the United States of America; • eligible as collateral for U.S. Treasury tax and loan accounts, unless otherwise specified by the U.S. Treasury; • among those obligations which U.S. national banks may deal in, underwrite and purchase for their own accounts in an amount up to 10 percent of unimpaired capital and surplus; • eligible as collateral for advances by U.S. Federal Reserve Banks to member banks; · legal investments for U.S. federal savings associations and U.S. federal savings banks to the extent specified in applicable regulations; • eligible as collateral for advances by U.S. Federal Home Loan Banks to members for which Power Bonds are legal investments; and • legal investments for U.S. federal credit unions, subject to applicable regulations. See "Legality of Investment in the United States." No Acceleration Rights..... The Bonds will not contain any provisions permitting the Holders to accelerate the maturity thereof on the occurrence of any default or other event. See "The Basic Resolution; Power Bonds, Discount Notes and Other Indebtedness" - "Events of Default" in the current Information Statement. Taxation ..... United States federal income tax generally will not be withheld from payments on Bonds or Strips that are beneficially owned by non-U.S. beneficial owners (as defined under "United States Tax Matters"), provided that an appropriate United States Internal Revenue Service Form W-8BEN (or other appropriate form) is completed and provided. See "United States Tax Matters." The Bonds are not subject to redemption by reason of the imposition of withholding or other tax by any jurisdiction, and TVA will have no

obligation to pay additional interest or other amounts in respect of any such tax that may be imposed on payments on the Bonds or Strips as a result of a change in law or otherwise, including any withholding tax that may be imposed as a result of a failure to provide an applicable United States Internal Revenue Service form. For further discussion of United States tax consequences with respect to the purchase, ownership or disposition of the Bonds and Strips, see "United States Tax Matters."

 Common Code
 012341733

 ISIN
 US88059I DN91

 CUSIP Number
 88059I DN9

If the Bonds are stripped into their separate Interest and Principal Components, the following ISIN and CUSIP numbers will apply:

	<u>ISIN</u>	CUSIP
Interest Components		
July 18, 2001	US88059E SR61	88059E SR6
January 18, 2002	US88059E SS45	88059E SS4
July 18, 2002	US88059E ST28	88059E ST2
January 18, 2003	US88059E SU90	88059E SU9
July 18, 2003	US88059E SV73	88059E SV7
January 18, 2004	US88059E SW56	88059E SW5
July 18, 2004	US88059E SX30	88059E SX3
January 18, 2005	US88059E SY13	88059E SY1
July 18, 2005	US88059E SZ87	88059E SZ8
January 18, 2006	US88059E TA28	88059E TA2
July 18, 2006	US88059E TB01	88059E TB0
January 18, 2007	US88059E TC83	88059E TC8
July 18, 2007	US88059E TD66	88059E TD6
January 18, 2008	US88059E TE40	88059E TE4
July 18, 2008	US88059E TF15	88059E TF1
January 18, 2009	US88059E TG97	88059E TG9
July 18, 2009	US88059E TH70	88059E TH7
January 18, 2010	US88059E TJ37	88059E TJ3
July 18, 2010	US88059E TK00	88059E TK0
January 18, 2011	US88059E TL82	88059E TL8
Principal Component	US88059F BH38	88059F BH3

#### TENNESSEE VALLEY AUTHORITY

The Tennessee Valley Authority is one of the largest wholesale producers of electricity in the United States of America having produced over 151 billion kilowatt-hours ("kWh") of electricity in fiscal year 2000. The TVA system supplies electric power to a region containing nearly eight million people located in parts of Tennessee, Kentucky, Mississippi, Alabama, Georgia, North Carolina and Virginia.

TVA is a wholly owned corporate agency and instrumentality of the United States of America established pursuant to the Tennessee Valley Authority Act of 1933, as amended (the "Act"), primarily to develop and manage the resources of the Tennessee Valley region. Historically, the programs at TVA have consisted of power and nonpower programs. The Act requires TVA's electric system operations to be self-supporting from power system revenues, which were about \$6.8 billion in fiscal year 2000. The U.S. Congress ("Congress") does not appropriate funds to TVA for its power program. The Act authorizes TVA to issue Evidences of Indebtedness (as defined in "Description of Bonds"), the proceeds of which TVA may only use to finance its power program. TVA's nonpower activities have included responsibilities associated with operation of the Tennessee River system, land management, economic development and the environment. While Congress historically has appropriated amounts to fund TVA's nonpower programs (including \$50 million for fiscal year 1999), Congress passed legislation in 1997 providing for the funding of these programs with revenues from TVA's power program and other TVA revenue sources when appropriations are insufficient. In fiscal year 1999, TVA spent \$75 million on essential stewardship activities, \$43 million of which came from appropriations. TVA received no appropriations for fiscal years 2000 and 2001. In fiscal year 2001, TVA expects to spend approximately \$72 million on these programs, principally all of which will come from power funds. See "The Basic Resolution; Power Bonds, Discount Notes and Other Indebtedness" — "Recent Legislation" in the current Information Statement.

For over six decades, TVA has been associated with bringing prosperity to a significant region of the United States. Its dams have averted an estimated \$4 billion in flood damage; its power program has brought electricity to a large undeveloped area of the country; and its economic development program has contributed to a vast increase in the number of jobs in the Tennessee Valley.

Electric power industry restructuring is changing the way TVA and utilities across the nation generate, transmit and distribute electricity. TVA is positioning itself to successfully compete in a restructured marketplace by sustaining excellent operational performance and achieving greater financial flexibility. See "Competition" in the current Information Statement.

TVA is an advocate for the public's interest in universal access, customer service and reliability, economic development and environmental protection. TVA will continue to work actively with Congress to ensure that these standards are upheld through the development of an equitable, effective framework for success in a restructured marketplace.

#### **USE OF PROCEEDS**

TVA will use the net proceeds from the sale of the Bonds to retire existing debt.

#### RECENT DEVELOPMENTS

#### **Financial Results**

The financial highlights for the fiscal years ended September 30, 2000 and 1999 have been derived from TVA's audited financial statements. The following information should be read in conjunction with the audited financial statements and notes thereto (the "2000 Financial Statements") presented on pages C-22 through C-42 herein.

# FINANCIAL HIGHLIGHTS — POWER PROGRAM At September 30 or for the years ended September 30, as appropriate

	2000	1999	Percent Change
	(in mil	llions)	
Summary Statements of Income			
Operating revenues	\$ 6,762	\$ 6,595	3
Operating expenses	(5,019)	(4,926)	2
Operating income	1,743	1,669	4
Other income, net	17	10	NM
Interest expense, net	(1,736)	(1,777)	(2)
Cumulative effect of change in accounting principle		217	NM
Net income	\$ 24	\$ 119	NM
Total assets	\$33,181	\$33,386	<u>(1</u> )
Discount notes	\$ 1.274	\$ 982	30
Long-term debt, including current maturities	24,711	25,394	(3)
Total indebtedness	\$25,985	\$26,376	<u>(1</u> )
Cash flows from operations	\$ 1,584	\$ 1,431	11
Capital expenditures	\$ 867	\$ 829	5

# POWER SYSTEM STATISTICS At September 30 or for the Years Ended September 30, as Appropriate

	2000	1999	Percent Change
System input (millions of kilowatt-hours):			
System generation:			
Hydro, including pumped storage	8,769	11,065	(21)
Fossil	95,271	91,630	4
Nuclear	46,921	44,514	5
Combustion turbine	1,032	1,025	1
Total net generation	151,993	148,234	3
Purchased	12,516	12,770	(2)
Total system input	164,509	161,004	2
System output (millions of kilowatt-hours): Sales:			
Municipalities and cooperatives	125,991	122,880	3
Industries directly served	22,204	22,885	(3)
Federal agencies and other	11,376	10,190	12
Total sales	159,571	155,955	2
Other	1,062	1,232	(14)
Losses	3,876	3,817	2
Total system output	164,509	161,004	2
Net winter dependable capacity (megawatts)	29,469	28,502	3
System peak load (megawatts) — summer	29,344	28,295	4
System peak load (megawatts) — winter	25,940	26,388	(2)
Annual load factor (percent)	60.2	61.6	(2)
Number of employees as of September 30	13,145	13,322	(1)
Percent net winter dependable capacity by fuel source:			
Fossil	51%	53%	(4)
Nuclear	19%	20%	(5)
Hydro	19%	19%	
Combustion turbine	11%	8%	38

# TENNESSEE VALLEY AUTHORITY

# COMPARATIVE FIVE-YEAR DATA STATISTICAL AND FINANCIAL SUMMARIES For the Years Ended September 30

		2000		1999		1998		1997		1996
Sales (millions of kWh) <sup>a</sup> :										
Municipalities and cooperatives		125,991				123,330		114,771		117,035
Industries directly served		22,204		22,885		18,514		17,359		16,599
Federal agencies and other		11,376		10,190		21,293		27,198		19,964
Total sales	_	159,571	_	155,955	_	163,137	_	159,328	_	153,598
Operating revenues (millions of dollars) <sup>a</sup> : Electric:										
Municipalities and cooperatives	\$	5,676	\$	5,510	\$	5,554	\$	4,811	\$	4,980
Industries directly served		626		642		523		464		452
Federal agencies and other		361		357		556		561		430
Other		99		86		96		98	_	89
Total revenues	\$	6,762	\$	6,595	\$	6,729	\$	5,934	\$	5,951
Electric revenue per kWh (cents)		4.18		4.17		4.07		3.66		3.82
Winter net dependable generating capacity (megawatts):										
Hydro <sup>b</sup>		5,544		5,492		5,491		5,384		5,298
Fossil		15,042		15,049	15,003			15,014		15,012
Nuclear units in service		5,729	5,729			5,620		5,625	5,54	
Combustion turbine		3,154	2,232		2,384			2,394		2,268
Total capacity		29,469		28,502	28,498				28,12	
System peak load					-		-			
(megawatts) — summer		29,344		28,295		27,253		26,661		25,376
System peak load (megawatts) — winter		25,940		26,388	23,204			26,670	25,99	
Percent gross generation by fuel source										
Fossil		63%		63%		62%		61%		65%
Hydro		6%		7%		10%		11%		11%
Nuclear		31%		30%		28%		28%		24%
Fuel cost per kWh (cents)										
Fossil		1.27		1.28		1.25		1.23		1.23
Nuclear		.49		.51		.71		.58		.56
generation		1.05		1.05		1.10		1.04		1.06
Fuel data:										
Net thermal generation (millions of										
kWh)		143,224		137,169		139,727		135,735		131,898
Billion Btu	1,	,470,452	1	,403,110	1	,426,151	1	,381,837	1	,338,157
Fuel expense (millions of dollars)		1,504		1,434		1,538		1,406		1,395
Cost per million Btu (cents)		102.29		102.21		107.81		101.73		104.22
Net heat rate, fossil only		10,267		10,229		10,207		10,180		10,145

<sup>&</sup>lt;sup>a</sup> Sales and revenues have been adjusted to include sales to other utilities.

Includes 405 megawatts of dependable capacity from the Corps of Engineers projects on the Cumberland River System.

#### **Other Matters**

Rates, Customers and Market. In April 2000, TVA implemented the Wholesale Energy to Market Program. This experimental program provides an opportunity for distributors of TVA power to gain knowledge and experience about wholesale energy markets while limiting their exposure to risk. On a weekly basis, participating distributors may elect to purchase power (in an amount equal to up to 5 percent of the average weekly energy taken by the distributor from TVA during the TVA fiscal year beginning October 1, 1997) and arrange for its delivery to the TVA system. TVA credits each participating distributor's wholesale power bill for the amount of power the distributor arranges for delivery to the TVA power system at the prices TVA quotes weekly for these deliveries. Each participating distributor continues to be a full requirements customer of TVA and must pay any additional costs incurred by TVA in the event of any disruption of the delivery arrangements made by the distributor under this program.

Environmental Matters. During 1998 TVA adopted a new clean air strategy to install ten selective catalytic reduction systems ("SCRs") that is designed to reduce nitrogen oxide emissions from its coal-fired plants. In 2000, TVA committed to an additional eight SCRs to further reduce its nitrogen oxide emissions. The cost of implementing this strategy in total is expected to be in excess of \$850 million. This would be in addition to amounts TVA has already spent to comply with the 1990 Clean Air Act Amendments. TVA's new strategy should bring TVA into compliance with the U.S. Environmental Protection Agency's ("EPA") ozone-transport regulations discussed below. See "Environmental Matters" — "Air Pollution" in the current Information Statement.

The U.S. Court of Appeals for the District of Columbia recently upheld the U.S. Environmental Protection Agency's mandated revisions to State Implementation Plans for reduction of ozone transport (the " $NO_XSIP$  Call Rule"). See "Environmental Matters" — "Air Pollution" in the current Information Statement for a discussion of this rule. The previous stay of the requirement that states submit to EPA plans to comply with the  $NO_XSIP$  Call Rule has been lifted, and the states were directed to submit complying plans by October 2000. On August 31, 2000, the court ordered the initial compliance date that sources (including TVA sources) must meet under the  $No_XSIP$  Call Rule to be extended from May 2003 to May 2004.

On May 4, 2000, TVA filed a petition for review in a federal appeals court seeking review of an administrative order issued to TVA in November 1999 by EPA. TVA requested that the court stay EPA's order, and on August 17, 2000, the court granted this stay. In its order, EPA alleged that TVA violated the Clean Air Act in the course of maintaining certain of its coal-fired generating units over the last two decades. (For more information about EPA's administrative order see "Environmental Matters" — "Air Pollution" in the current Information Statement). TVA brought legal proceedings after several months of settlement discussions with EPA produced no agreement. In the court case, TVA has requested the court to invalidate EPA's order because it is based on a new interpretation of the Clean Air Act that conflicts with the plain language of EPA's implementing regulations and previous EPA interpretations. Alabama Power, Duke Power and the Tennessee Valley Public Power Association ("TVPPA") have also petitioned for review of EPA's order to TVA, seeking to invalidate it. The court also allowed Georgia Power to intervene in opposition to EPA. The U.S. Department of Justice ("DOJ") is seeking to have TVA's petition for review dismissed on the basis of DOJ's view that TVA lacks legal authority to file the petition and that EPA's order should not be viewed as "final." TVA disagrees with DOJ's view. Though it is not possible to predict with certainty the impact on TVA of EPA's enforcement action, if EPA substantially prevails in this matter, TVA could be required to incur capital costs in excess of \$3 billion by 2010 to 2015 in order to implement EPA's order. Any additional controls that TVA could be required to install on units as a result of this matter would, however, also be sufficient to comply with reduction requirements that are anticipated under other air quality programs. Thus, because of other environmental program requirements, TVA would, in any event, likely have to incur a substantial portion of the costs that might result from the EPA enforcement action, albeit the schedule for installation of the controls could be accelerated by the EPA enforcement action. TVA currently estimates that the costs of such other programs could be in excess of \$2.5 billion.

On September 15, 2000, an internal appeals panel of EPA issued a decision on reconsideration of the administrative order EPA issued to TVA in November 1999. The reconsideration decision upheld most of EPA's legal claims, but dismissed part of them. TVA has asked the federal appeals court to review this internal EPA decision and the court has now consolidated all of these proceedings in one case. TVA has also received notices from two environmental groups that they intend to sue TVA in federal district courts raising the same allegations made by EPA.

Competition. TVA has been working closely with the TVPPA, the association that represents all distributors of TVA power, to further refine the consensus position on industry restructuring reached by TVA and the vast majority of the distributors of TVA power in September 1999. Recently, the consensus position on the TVA provisions to be included in national restructuring legislation was modified as follows: (1) simultaneous repeal of the "anti-cherry picking provision" and the "fence" (as these terms are used in the current Information Statement) would be effective on the effective date of the restructuring legislation rather than at a later time; (2) renegotiation of power contract terms would continue to be allowed for, but there would no longer be a one-year negotiation period required before distributors have the right to terminate the contract upon three years' notice; (3) distributors would have statutory rights to take partial requirements from other suppliers in the absence of reaching a different agreement with TVA on partial requirements; (4) most of TVA's existing regulatory roles with respect to distributors would be reduced rather than terminated; and (5) new TVA generation would be limited to meet demand within its current service territory rather than being limited to locations within its current territory without regard to demand. Other portions of the consensus position remain unchanged. See "Competition" in the current Information Statement. In May 2000, Senators Frist, Thompson and Cochran introduced a bill in the Senate that incorporates this consensus position. TVA anticipates that a similar bill will be introduced during this congressional session.

**Power System.** On August 17, 2000, TVA met an all-time high demand for electricity when power demand reached 29,344 megawatts, surpassing by 374 megawatts the previous system peak set on August 9, 2000, and by 1,049 megawatts the system's fiscal year 1999 record peak (set on July 30, 1999).

TVA installed eight 85 MW natural-gas combustion turbines in time for the summer 2000 peak demands for power. Four units were installed at the Gallatin plant and four at the Johnsonville plant, both of which have existing combustion turbines. TVA is also planning to install up to eight additional 85 MW natural-gas combustion turbines in 2001.

*Management.* Chairman Crowell has announced his intention to retire from TVA in April 2001. In addition, Mr. Zigrossi and Mr. Christenbury both retired from TVA in December 2000. In January 2001, Maureen Dunn assumed the position of Executive Vice President and General Counsel. Ms. Dunn has served as an attorney with TVA since May 1978 and assumed the position of Assistant General Counsel in September 1986.

# 2000 MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

### FISCAL 2000 COMPARED WITH FISCAL 1999

#### Operating Revenues

Operating revenues were \$6,762 million in fiscal 2000, compared with \$6,595 million in fiscal 1999. The \$167 million increase was primarily due to an increase in energy sales to municipalities and cooperatives as a result of the hot summer during fiscal 2000. Accordingly, total kWh sales increased 3.6 billion kWh, from 156.0 billion in fiscal 1999 to 159.6 billion in fiscal 2000.

#### Operating Expenses

Operating expenses increased \$93 million, or 2 percent, from \$4,926 million in fiscal 1999 to \$5,019 million in fiscal 2000. This increase was primarily due to higher fuel and purchased power expense of \$183 million in fiscal 2000 as a result of hotter summer weather and increased power demand, and establishment of a \$75 million inventory valuation reserve, partially offset by a \$140 million reduction in the amount of accelerated amortization recorded in fiscal 2000 (see note 1 — Accelerated amortization).

#### Interest Expense

Net interest expense declined \$41 million from \$1,777 million in fiscal 1999 to \$1,736 million in fiscal 2000. Total outstanding indebtedness as of September 30, 2000, was \$26.0 billion, with an average interest rate of 6.83 percent; as of September 30, 1999, this amount outstanding was \$26.4 billion, with an average interest rate of 6.83 percent.

#### FISCAL 1999 COMPARED WITH FISCAL 1998

#### Operating Revenues

Operating revenues were \$6,595 million in fiscal 1999, compared with \$6,729 million in fiscal 1998. The \$134 million decrease was primarily due to a reduction in wholesale sales to other utilities related to mild weather and a weaker spot market for power during fiscal 1999.

#### Operating Expenses

Total operating expenses increased \$377 million, from \$4,549 million in fiscal 1998 to \$4,926 million in fiscal 1999. This increase was primarily due to a \$261 million charge for the acceleration of the amortization of regulatory assets (see note 1 — Accelerated amortization) coupled with a \$111 million increase in the amortization of regulatory assets attributable to the reclassification of certain nuclear fuel costs (see note 1 — Other deferred charges).

#### Interest Expense

Net interest expense declined \$182 million from \$1,959 million in fiscal 1998 to \$1,777 million in fiscal 1999. This reduction largely reflects savings associated with the refinancing of \$3.2 billion of debt issues formerly held by the Federal Financing Bank. Total outstanding indebtedness as of September 30, 1999, was \$26.4 billion, with an average interest rate of 6.83 percent; as of September 30, 1998, this amount outstanding was \$26.7 billion, with an average interest rate of 7.45 percent.

#### Liquidity and Capital Resources

#### Capital Structure

During the first 25 years of TVA's existence, the U.S. Government made appropriation investments in TVA power facilities. In 1959 TVA received congressional approval to issue bonds to finance its growing power program. For the past four decades, TVA's power program has been required to be self-supporting. As a

result, TVA funds its capital requirements through internal cash generation or through borrowings (subject to a congressionally mandated \$30 billion limit).

A return on the U.S. Government's initial appropriation investment in TVA power facilities, plus a repayment of the initial investment, is specified by law. The payment for fiscal 2000 was \$54 million, and total cumulative repayments and return on investment by TVA to the Treasury exceed \$3 billion.

#### Cash Flows

Net cash provided by power program operations for fiscal 2000, 1999 and 1998 was \$1,584 million, \$1,431 million and \$1,394 million, respectively. This positive trend reflects improvements made in TVA's operations during the three-year period.

Net cash used in investing activities for fiscal 2000, 1999 and 1998 was \$1,035 million, \$956 million and \$742 million, respectively. The \$79 million increase from fiscal 1999 to fiscal 2000 was primarily due to an increase in construction expenditures of \$38 million reflecting the construction of natural gas combustion turbines for peaking power and an increase in nuclear fuel enrichment and fabrication costs of \$49 million.

Net cash used in financing activities for fiscal 2000, 1999 and 1998 was \$304 million, \$763 million and \$560 million, respectively. For fiscal 2000 the cash used in financing activities reflects the aggregate net reduction of total outstanding debt of \$391 million coupled with borrowing costs and other financing costs of \$202 million, offset by the proceeds from combustion turbine financing of \$300 million.

#### Capital Resources

During fiscal 2000, 1999 and 1998, TVA accessed the capital markets through cost-effective long-term financing structures and continued to expand its investor base by tapping the global and retail debt markets. During fiscal 2000 TVA entered the bond market with seven issues. TVA tapped the retail markets in February 2000 by issuing five callable bonds totaling \$250 million with maturities ranging from 5 to 30 years. In May TVA issued 12-year bonds with a two-year put feature and a par value of \$750 million, and because of the favorable response, issued an additional \$250 million in July. The final bond offering of \$1 billion in June targeted global investors and reestablished TVA's benchmark in the 30-year sector. The proceeds from the borrowings were used to refinance existing debt.

In September TVA received approximately \$300 million in proceeds by entering into a lease-leaseback transaction for eight new peaking combustion turbine units. The proceeds from this transaction were for the benefit of its power program.

On November 30, 2000, TVA's short-term debt owed to the U.S. Treasury was \$121 million.

#### Market Risk

Risk Policies

TVA is exposed to market risks, including changes in interest rates, foreign currency exchange rates and volatility of certain commodity and equity market prices. To manage the volatility attributable to these exposures, TVA has entered into various nontrading derivative transactions, principally an interest rate swap agreement, foreign currency swap contracts, forwards, futures and option contracts. TVA has established its Risk Management Committee, which maintains responsibility for reviewing and approving controls and procedures for TVA-wide risk management activities including the oversight of models and assumptions used to measure risk, the review of counterparty exposure limits and the establishment of formal procedures for use of financial hedging instruments.

TVA is exposed to losses in the event of counterparties' nonperformance and accordingly has established controls to determine the creditworthiness of counterparties in order to mitigate exposure to counterparty credit risk. With respect to hedging activities, TVA risk management policies allow the use of derivative financial instruments to manage financial exposures but prohibit the use of these instruments for speculative or trading purposes. Prior to October 1, 2000, TVA's effective implementation date for Statement of Financial

Accounting Standards (SFAS) No. 133, Accounting for Derivative Instruments and Hedging Activities, TVA accounted for such hedging activities using the deferral method, with gains and losses recognized in the accompanying financial statements when the related hedged transaction occurs. See further discussion related to TVA's fiscal 2001 adoption of SFAS No. 133 at New Accounting Pronouncements.

#### Interest Rate and Foreign Currency Risk

TVA manages its daily cash needs through issuance of discount notes and other short-term borrowings. These borrowings with maturities of less than one year expose TVA to fluctuations in short-term interest rates. TVA is not exposed to changes in interest rates on most of its long-term debt until such debt matures and may be refinanced at the then-applicable rates. An interest rate swap is used to hedge TVA's exposure related to its inflation-indexed accreting principal bonds, and currency swap contracts are used as hedges for foreign currency denominated debt issues (see note 5 — Foreign currency transactions and interest rate swap). Based on TVA's overall interest rate exposure at September 30, 2000, including derivative and other interest rate sensitive instruments, a near-term one percentage point change in interest rates would not have a material impact on TVA's financial position or results of operations for fiscal 2000.

#### Commodity Price Risk

TVA is exposed to the impact of market fluctuations in the price and transportation costs of certain commodities and fuels including, but not limited to, coal, natural gas and electricity. TVA employs established policies and procedures to manage risks associated with these market fluctuations by using various commodity-based derivative instruments, including futures, forwards and option contracts. To monitor the risk of commodity trading activities, TVA employs a daily Value at Risk (VaR) methodology, which utilizes a statistical-based approach to determine adjusted historical changes in the value of a market risk sensitive commodity-based financial instrument to estimate the amount of change in the current value of the instrument that could occur at a specified confidence level over a specified interval. Based on TVA's VaR analysis of its overall commodity price risk exposure at September 30, 2000, management does not anticipate a materially adverse effect on TVA's financial position or results of operations as a result of market fluctuations.

#### Equity Price Risk

TVA maintains trust funds, consistent with the United States Nuclear Regulatory Commission requirements, to fund certain costs of decommissioning its nuclear generating units. These funds are managed by various money managers and are primarily invested in marketable equity securities, which are exposed to price fluctuations in equity markets. TVA actively monitors the trust funds' portfolios by benchmarking the performance of their investments against certain price indices. The accounting for nuclear decommissioning recognizes that, based on expected performance of the portfolio, sufficient funds have been set aside to fully fund expected decommissioning obligations, and, therefore, fluctuations in trust fund marketable security returns do not affect the earnings of TVA (see notes 1 and 9 — Decommissioning costs).

#### **Futures Contracts**

TVA may enter into electricity and gas futures contracts for the sole purpose of limiting or otherwise hedging TVA's economic risks directly associated with electric power generation, purchases and sales. The Chicago Board of Trade has designated the TVA power transmission system as a hub for electricity futures contracts.

#### **Other Issues**

#### Year 2000 Readiness

The "Year 2000" issue concerned the inability of information technology systems to properly recognize and process date-sensitive information related to the year 2000 and beyond. TVA did not experience any significant Year 2000 problems in its power production, delivery system, administration, billing and accounting systems. The total cost of addressing Year 2000 systems readiness was approximately \$40 million.

#### Spent Nuclear Fuel

TVA has entered into a contract with the Department of Energy (DOE) for the disposal of spent nuclear fuel. Payments are based on TVA's nuclear generation and charged to expense. The provisions of the contract called for DOE to begin accepting spent nuclear fuel from utilities on January 31, 1998, the date provided by the Nuclear Waste Policy Act of 1982. However, as of September 30, 2000, DOE has not accepted any spent fuel. TVA's spent nuclear fuel storage facilities will be sufficient to provide storage space for spent fuel generated on TVA's system through 2004 for its Sequoyah Plant, through 2006 for its Browns Ferry Plant and through 2018 for its Watts Bar Plant. TVA plans to extend storage capability through life-of plant if necessary by using higher density racks in its existing storage pools or dry storage casks. Additional storage capacity increases will require NRC approval. However, all of the above methods of extending storage capabilities have been licensed by the NRC at other facilities.

#### Labor Agreements

On September 30, 2000, TVA had 13,145 employees, of which 5,078 were trades and labor employees. Neither the Federal labor relations laws covering most private sector employees nor those covering most Federal agencies are applicable to TVA. However, the Board has a longstanding policy of acknowledging and dealing with recognized representatives of its employees, and this policy is reflected in long-term agreements to recognize trades and labor unions (or their successors) through 2007 and salary policy unions (or their successors) through 2012. Federal law prohibits TVA employees from engaging in strikes against TVA.

#### Pending Litigation

The Environmental Protection Agency (EPA) has issued TVA an administrative order directing TVA to put new source controls on 14 of its units and to evaluate whether more controls should be installed on other units. TVA has challenged the validity of this order. See *Environmental Matters* for a further discussion of this order.

TVA is also a party to various other civil lawsuits and claims that have arisen in the ordinary course of business. Although the outcome of these lawsuits and claims cannot be predicted with any certainty, it is the opinion of TVA counsel that their ultimate outcome should not have a material adverse effect on TVA's financial position or results of operations.

#### Environmental Matters

TVA's activities are subject to various Federal, state and local environmental statutes and regulations. Major areas of regulation affecting TVA's activities include air pollution control, water pollution control and management and disposal of solid and hazardous wastes.

TVA has incurred and continues to incur substantial capital expenditures and operating expenses to comply with environmental requirements. Because these requirements change frequently, the total amount of these costs in the future is not now determinable. It is anticipated that environmental requirements will become more stringent and that compliance costs will increase, perhaps by substantial amounts.

Under the Clean Air Act, the EPA has promulgated national ambient air quality standards for certain air pollutants, including sulfur dioxide, particulate matter and nitrogen oxide ( $NO_x$ ). Coal-fired generating units such as TVA's are major sources of these pollutants. The 1990 Amendments to the Clean Air Act established a number of new requirements relating to acid rain control, including additional requirements for sulfur dioxide and  $NO_x$  emissions that are to be met in two phases. Through 2000 TVA had invested approximately \$1 billion in capital for Phase I and Phase II compliance. TVA estimates it will spend roughly an additional \$100 million in capital through 2003 to finalize the Phase II compliance measures. This will complete TVA's program for reducing sulfur dioxide and  $NO_x$  to comply with the acid rain control requirements of the Clean Air Act.

During 1998 TVA adopted a new clean air strategy to install ten selective catalytic reduction systems (SCRs) to reduce NO<sub>x</sub> emissions from its coal fired plants. In 2000 TVA committed to an additional eight

SCRs to further reduce its  $NO_x$  emissions. The cost of implementing this strategy is expected to be between \$800 million and \$900 million in addition to amounts TVA has already spent to comply with the 1990 Clean Air Act Amendments. TVA's new strategy should bring TVA into compliance with EPA's ozone-transport regulations. However, recent court decisions have overturned or delayed other ozone related regulations. While these court decisions may have some effect on TVA's plans, TVA is committed to improving the air quality of the region, and TVA's  $NO_x$  strategy was developed in part to help TVA's region continue to improve its air quality.

Although TVA cannot with certainty project the costs for additional reductions of  $NO_x$ , sulfur dioxide and particulate matter emissions beyond those required by the acid rain provisions of the 1990 Clean Air Act Amendments, the costs for these additional reductions could exceed \$2.5 billion.

EPA is investigating whether coal-fired utilities in the eastern U.S., including TVA, may have modified their coal-fired boilers without complying with new source review requirements. The outcome of this investigation is ongoing and uncertain. TVA contends EPA's investigation is based on a new interpretation of an old rule and that TVA has routinely maintained its power plants to ensure efficient, reliable power generation while complying with all requirements. However, EPA has issued TVA an administrative order directing TVA to put such new source controls on 14 of its units and to evaluate whether more controls should be installed on other units. TVA has challenged the validity of this order and the Eleventh Circuit Court of Appeals has stayed the order pending its review. It is not possible to predict with certainty what impact implementation of EPA's order would have on TVA if TVA's challenge is unsuccessful. If EPA substantially prevails, TVA could be required to incur capital costs in excess of \$3 billion (net present value) by 2010 to 2015. Any additional controls that TVA could be required to install on units as a result of this matter would, however, also be sufficient to comply with reduction requirements that are anticipated under other air quality programs discussed above. Thus, because of the other environmental program requirements, TVA would, in any event, likely have to incur a substantial portion of the costs that might result from the EPA enforcement action, albeit the schedule for the installation of the controls could be substantially accelerated by the EPA enforcement action. TVA fully supports the need to further reduce emissions from coal-fired plants and seeks a resolution that will not put TVA customers and the region at a disadvantage.

#### Nonpower Roles and Responsibilities Transition

TVA's responsibilities for managing public resources began with its creation in 1933. Today these resource management activities help sustain the interconnected tributaries and the main stem of the Tennessee River — the nation's fifth largest river system. Multiple objectives are balanced to provide flood control, navigation, electric power production, recreation and environmental protection. Funding for these programs historically has included Federal appropriations, power revenues and nonpower revenues such as user fees.

In October 1997, Congress directed TVA to fund essential stewardship activities related to its management of the Tennessee River system and TVA properties with power funds in the event that there were insufficient appropriations or other available funds to pay for such activities in any fiscal year. Congress did not provide any appropriations to TVA to fund such activities in 2000 and is not expected to in 2001. Consequently, during 2000, TVA paid \$72 million for essential stewardship activities primarily with power revenues, with the remainder funded by a combination of user fees and other forms of nonpower revenue and fund balances unused in prior years. TVA spent approximately \$75 million for such activities in both 1999 and 1998.

During 1999, TVA received total Federal appropriations of \$50 million, of which \$43 million was for essential stewardship activities and \$7 million was for TVA's Land Between The Lakes National Recreation Area (LBL). During 1998, TVA received total Federal appropriations of \$70 million, of which \$63 million was for stewardship activities, including \$3 million for environmental cleanup work at the Muscle Shoals, Ala., reservation, and \$7 million was for LBL.

In addition, administrative jurisdiction over LBL was transferred to the Secretary of Agriculture effective October 1, 1999. TVA is responsible for certain transition costs associated with the transfer of LBL, which are

estimated to be approximately \$10 million. This liability was accrued on the nonpower balance sheet at September 30, 1999, and partially liquidated in 2000. At September 30, 2000, TVA had transferred \$56 million of property and equipment to the U.S. Forest Service, leaving a liability of approximately \$7 million of transition costs remaining.

TVA retains responsibility for management of the remaining nonpower assets and settlement of nonpower obligations. TVA remains committed to carrying out those essential stewardship activities related to its management of the Tennessee River system and TVA properties and to the protection and equitable distribution of public benefits that are central to TVA's management of its integrated system.

#### Accounting Standards

TVA accounts for the financial effects of regulation in accordance with SFAS No. 71, *Accounting for the Effects of Certain Types of Regulation*. As a result, TVA records certain regulatory assets and liabilities that would not be recorded on the balance sheet under generally accepted accounting principles for nonregulated entities.

TVA has approximately \$979 million of regulatory assets (see note 1 — Other deferred charges and Debt issue and reacquisition costs) along with approximately \$6.3 billion of deferred nuclear plants as of September 30, 2000. In the event that restructuring of the utility industry changes the application of SFAS No. 71, TVA would be required to evaluate such regulatory assets and deferred nuclear plants under the provisions of SFAS No. 121, Accounting for the Impairment of Long-Lived Assets and Long-Lived Assets to Be Disposed Of. SFAS No. 121 establishes criteria for evaluating and measuring asset impairments and states that regulatory assets no longer probable of recovery through future revenues be charged to earnings. Such an event may have a material adverse effect on future results of operations from the write-off of regulatory assets. However, TVA intends to seek full recovery of any regulatory assets that may result from the transition to a competitive market.

#### New Accounting Pronouncements

In June 1998 the Financial Accounting Standards Board (FASB) issued SFAS No. 133, Accounting for Derivative Instruments and Hedging Activities, which requires that every derivative instrument (including certain derivative instruments embedded in other contracts) be recorded on the balance sheet as either an asset or a liability measured at its fair value. The statement requires that changes in the derivative's fair value be recognized currently in earnings unless specific hedge accounting criteria are met. In June 2000, the FASB issued SFAS No. 138, Accounting for Certain Derivative Instruments and Certain Hedging Activities — An Amendment of FASB Statement No. 133, further clarifying certain SFAS No. 133 implementation issues.

During fiscal 2000 TVA formed a cross-functional team to identify and evaluate business contracts and accounting transactions to determine the applicability of SFAS No. 133, and to develop required contemporaneous documentation and valuation methodologies for identified contracts to assess the effect on TVA's financial condition and results of operations upon adoption.

Effective October 1, 2000, TVA adopted the provisions of SFAS Nos. 133 and 138. Qualifying derivative contracts consisted of various purchased option contracts and certain currency and interest rate swap agreements (see note 5 — Foreign currency transactions and interest rate swap). TVA determined the fair value of such contracts to be approximately \$51 million at October 1, 2000, by utilizing a variety of independent market sources. In accordance with SFAS No. 133, these contracts qualify for cash-flow hedge treatment. Accordingly, the effective portion of gains and losses related to such contracts is reported in accumulated other comprehensive income, while the ineffective portion is recognized through the creation of a regulatory asset/liability. The amounts accumulated in other comprehensive income and regulatory asset/liability are recognized in earnings upon settlement of the related contracts. Such treatment reflects TVA's ability and intent to account for these derivative instruments on a settlement basis for rate-making purposes. As of October 1, 2000, TVA determined the effective portion of the gains related to the derivative contracts to be approximately \$51 million, which was recorded as a cumulative-effect type transition adjustment of

accumulated other comprehensive income and approximately \$0.3 million related to the ineffective portion (loss), which was recorded as a regulatory liability.

In December 1999 the Securities and Exchange Commission ("SEC") issued Staff Accounting Bulletin (SAB) No. 101, *Revenue Recognition in Financial Statements*, summarizing the SEC's views in applying generally accepted accounting principles to selected revenue recognition issues. In June 2000 an amendment was issued that delays the implementation until no later than the fourth quarter of fiscal years beginning after December 15, 1999. Although TVA is not required to do so, it will comply with the statement and believes that its practices already comply with the provisions of the bulletin. Its adoption is expected to have no material impact on TVA's reported results of operations, financial position or cash flows.

The FASB is proceeding with its project regarding accounting practices related to obligations associated with the retirement of long-lived assets and issued an Exposure Draft on Accounting for Obligations Associated with the Retirement of Long-Lived Assets in the first quarter of fiscal 2000. The proposed Statement would be effective for financial statements issued for fiscal years beginning after June 15, 2001. A second Exposure Draft on Accounting for the Impairment or Disposal of Long-Lived Assets and for Obligations Associated with Disposal Activities is currently out for comment. This proposed Statement would be effective for financial statements issued for fiscal years beginning after December 15, 2001. At the present time, TVA is unable to predict whether the implementation of these standards will be material to its results of operations or financial position.

#### Nuclear Decommissioning Costs

The FASB has undertaken a project regarding the accounting for closure and removal of long-lived assets, including the decommissioning of nuclear generating units. The FASB has reached several tentative conclusions with respect to the project; however, it is uncertain when a final statement will be issued and what impact it may ultimately have on TVA's financial position or results of operations.

TVA's accounting policy recognizes all obligations related to closure and removal of its nuclear units as incurred (see note 1 — Decommissioning costs). The liability for closure is measured as the present value of the estimated cash flows required to satisfy the related obligation and discounted at a determined risk-free rate of interest. The corresponding charge to recognize any additional obligation is effected through the creation of a regulatory asset. In addition, earnings from decommissioning fund investments, amortization expense of the decommissioning regulatory asset and interest expense on the decommissioning liability are deferred in accordance with SFAS No. 71.

# BALANCE SHEETS At September 30

	Power p	rogram	All pro	grams
	2000	1999	2000	1999
		(in mi	llions)	
ASSETS				
Current Assets				
Cash and cash equivalents	\$ 348	\$ 103	\$ 361	\$ 160
Accounts receivable	688	730	688	730
Fuel	141	178	141	178
Other	249	307	249	307
Total current assets	1,426	1,318	1,439	1,375
Property, Plant and Equipment				
Completed plant	30,157	29,569	31,189	30,685
Less accumulated depreciation	(9,520)	(8,762)	(9,813)	(9,074)
Net completed plant	20,637 793	20,807 730	21,376 793	21,611 730
Deferred nuclear generating units	6,325	6,320	6,325	6,320
Nuclear fuel and capital leases	559	560	559	560
Total property, plant and equipment	28,314	28,417	29,053	29,221
Investment Funds	840	731	840	731
Deferred Charges and Other Assets	144	122	176	153
Loans and other long-term receivables	1,302	1,188	176 1,302	1,188
Other deferred charges	1,155	1,610	1,155	1,610
Total deferred charges and other assets	2,601	2,920	2,633	2,951
Total assets	\$33,181	\$33,386	\$33,965	\$34,278
LIABILITIES AND PROPRIETARY	CAPITAL			
Current Liabilities				
Accounts payable	\$ 531	\$ 493	\$ 544	\$ 521
Accrued liabilities	200	178	200	182
Accrued interest	438 1,274	464 982	438 1,274	464 982
Current maturities of long-term debt	2,350	1,000	2,350	1,000
Total current liabilities	4,793	3,117	4,806	3,149
	,	•	•	*
Other Liabilities	2,455	2,156	2,455	2,156
Long-Term Debt	21.261	22.204	21.261	22.204
Public bonds — senior	21,261 1,100	23,294 1,100	21,261 1,100	23,294 1,100
Unamortized discount and other adjustments	(608)	(491)	(608)	(491)
Total long-term debt	21,753	23,903	21,753	23,903
	,	- ,	,	- ,
Proprietary Capital Appropriation investment	528	548	4,883	4,964
Retained earnings reinvested in power program	3,652	3,662	3,652	3,662
Accumulated net expense of nonpower programs			(3,584)	(3,556)
Total proprietary capital	4,180	4,210	4,951	5,070
Total liabilities and proprietary capital	\$33,181	\$33,386	\$33,965	\$34,278

# STATEMENTS OF INCOME — POWER PROGRAM For the Years Ended September 30

	2000	1998	
	(	in millions	)
Operating Revenues			
Sales of electricity			
Municipalities and cooperatives	\$5,676	\$5,510	\$5,554
Industries directly served	626	642	523
Federal agencies and other	361	357	556
Other revenue	99	86	96
Total operating revenues	6,762	6,595	6,729
Operating Expenses			
Fuel and purchased power	1,962	1,777	1,900
Operating and maintenance	1,443	1,403	1,347
Depreciation and amortization	1,185	1,181	1,038
Tax-equivalents	308	304	264
Accelerated amortization (notes 1 and 7)	121	261	
Total operating expenses	5,019	4,926	4,549
Operating Income	1,743	1,669	2,180
Other income, net	17	10	12
Income before interest expense and cumulative effect of change in accounting			
principle	1,760	1,679	2,192
Interest Expense			
Interest Dapense  Interest on debt	1,695	1,753	1,930
Amortization of debt discount, issue and reacquisition costs, net	94	60	84
Allowance for funds used during construction	(53)	(36)	(55)
<u> </u>	1,736	1.777	
Net interest expense	1,/30	217	1,959
Cumulative effect of change in accounting principle (notes I and I)		<u> </u>	
Net Income	\$ 24	\$ 119	\$ 233

# STATEMENTS OF CASH FLOWS For the Years Ended September 30

	Power program					A						
		2000		1999		1998	_	2000		1999		1998
						(in mil	illions)					
<b>Cash Flows from Operating Activities</b>												
Net power income	\$	24	\$	119	\$	233	\$		\$	119	\$	233
Net expense of nonpower programs		_		_		_		(28)		(96)		(91)
Items not requiring (providing) cash		1 200		1 250		1 000		1 200		1.060		1 102
Depreciation and amortization		1,289		1,250		1,090		1,299		1,263		1,103
Accelerated amortization		121		261		_		121		261		_
Allowance for funds used during		(52)		(26)		(55)		(52)		(26)		(55)
construction		(53) 177		(36) 177		(55) 264		(53) 177		(36) 177		(55) 264
Cumulative effect of change in accounting		1 / /		1//		204		1//		1//		204
principle		_		(217)		_		_		(217)		_
Other, net		25		(26)		(2)		25				9
Changes in current assets and liabilities		20		(20)		(2)		23				
Accounts receivable		42		65		(95)		42		65		(89)
Inventories and other		19		(35)		(72)		19		(35)		(72)
Accounts payable and accrued liabilities		61		(19)		72		42		(21)		59
Accrued interest		(26)		(23)		(11)		(26)		(23)		(11)
Other, net		(95)		(85)		(30)		(95)		(85)		(36)
Net cash provided by operating activities		1,584		1,431		1,394		1,547		1,372		1,314
<b>Cash Flows from Investing Activities</b>												
Construction expenditures		(867)		(829)		(637)		(867)		(830)		(642)
Allowance for funds used during												
construction		53		36		55		53		36		55
Nuclear fuel		(184)		(135)		(151)		(184)		(135)		(151)
Other, net		(37)	_	(28)	_	<u>(9)</u>	_	(38)	_	(21)	_	(8)
Net cash used in investing activities	(	1,035)		(956)		(742)		(1,036)		(950)		(746)
Cash Flows from Financing Activities												
Long-term debt												
Issues		2,250		4,506		4,625		2,250		4,506		4,625
Redemptions	(	2,944)		(4,046)		(4,930)		(2,944)		(4,046)	(	(4,930)
Short-term borrowings, net		292		(775)		(394)		292		(775)		(394)
Proceeds from combustion turbine financing		300		(201)		100		300		(201)		100
Financing costs, net		(148)		(391)		199		(148)		(391)		199
Congressional appropriations		(54)		(57)		(60)		(54)		50		69 (60)
Payments to U.S. Treasury		(54)		(57)		(60)		(54) (6)		(57)		(60)
Other, net		(204)	_	(7(2)	_	(5(0)	-		_	(712)	_	(401)
Net cash used in financing activities	_	(304)	_	(763)	_	(560)	-	(310)	_	(713)	_	(491)
Net change in cash and cash equivalents		245		(288)		92		201		(291)		77
Cash and cash equivalents at beginning of		102		201		200		1.60		451		27.4
period	_	103	_	391	_	299	_	160	_	451	_	374
Cash and Cash Equivalents at End of Period	\$	348	\$	103	\$	391	\$	361	\$	160	\$	451

### **POWER PROGRAM**

# STATEMENTS OF CHANGES IN PROPRIETARY CAPITAL For the Years Ended September 30

	2000	1999	1998
		(in millions)	
Retained earnings reinvested at beginning of period	\$3,662	\$3,580	\$3,387
Net income	24	119	233
Return on appropriation investment	(34)	(37)	(40)
Retained Earnings Reinvested at End of Period	3,652	3,662	3,580
Appropriation investment at beginning of period	548	568	588
Return of appropriation investment	(20)	(20)	(20)
Appropriation investment at end of period	528	548	568
Proprietary Capital at End of Period	\$4,180	\$4,210	\$4,148

#### NONPOWER PROGRAMS

# STATEMENTS OF NET EXPENSE For the Years Ended September 30

	2000	1999	1998
		(in millions)	
Water and Land Stewardship	\$26	\$72	\$65
Land Between The Lakes	_	19	8
Economic Development	2	5	8
Environmental Research Center			10
Net Expense (note 10)	\$28	<u>\$96</u>	<u>\$91</u>

#### NONPOWER PROGRAMS

# STATEMENTS OF CHANGES IN PROPRIETARY CAPITAL For the Years Ended September 30

	2000	1999	1998
		(in millions)	
Proprietary capital at beginning of period	\$860	\$908	\$930
Congressional appropriations	_	50	69
Net expense	(28)	(96)	(91)
Transfers to other Federal agencies (note 10)	(56)	_	_
Other, net	(5)	(2)	
Proprietary Capital at End of Period	\$771	\$860	\$908

#### NOTES TO FINANCIAL STATEMENTS

#### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### General

TVA is a wholly owned corporate agency and instrumentality of the United States. It was established by the TVA Act with the objective of developing the resources of the Tennessee Valley region in order to strengthen the regional and national economy and the national defense by providing: (1) an ample supply of power within the region, (2) navigable channels and flood control for the Tennessee River System, and (3) agricultural and industrial development and improved forestry in the region. TVA carries out these regional and national responsibilities in a service area that centers on Tennessee and parts of Alabama, Georgia, Kentucky, Mississippi, North Carolina and Virginia.

TVA's operations have historically been divided into two types of activities — the power program and the nonpower programs. Substantially all TVA revenues and assets are attributable to the power program. The power program has historically been separate and distinct from the nonpower programs and is required to be self-supporting from power revenues and proceeds from the issuance of debt. The power program receives no congressional appropriations and is required to make annual payments to the U.S. Treasury in repayment of, and as a return on, the government's appropriation investment in TVA power facilities. Until 2000 most of the funding for TVA's nonpower programs was provided by congressional appropriations. Certain nonpower activities are also funded by various revenues and user fees. See note 10 for a discussion related to current and future funding of TVA's nonpower programs.

Power rates are established by the TVA Board of Directors as authorized by the TVA Act. The Act requires TVA to charge rates for power that, among other things, will produce gross revenues sufficient to provide funds for operation, maintenance and administration of its power system; payments to states in lieu of taxes; and debt service on outstanding indebtedness.

#### Fiscal year

Unless otherwise indicated, years (2000, 1999, etc.) refer to TVA's fiscal years ended September 30.

#### Revenue

Revenues from power sales are recorded as power is delivered to customers. TVA accrues estimated unbilled revenues for power sales provided to customers for the period of time from the end of the billing cycle to month-end.

Off-system sales are presented in the accompanying Statements of Income-Power Program as a component of Sales of electricity — Federal agencies and other.

#### Property, plant and equipment, and depreciation

Additions to plant are recorded at cost, which includes direct and indirect costs and an allowance for funds used during construction. The cost of current repairs and minor replacements is charged to operating expense. Nuclear fuel is valued at the lower of cost or market using the average cost method for raw materials and the specific identification method for nuclear fuel in reactor. Amortization of nuclear fuel is calculated on a units-of-production basis and is included in fuel expense. The TVA Act requires TVA's Board of Directors to allocate the cost of completed multipurpose projects between the power and nonpower programs, subject to the approval of the President of the United States. The original cost of property retired, together with removal costs less salvage value, is charged to accumulated depreciation. Depreciation is generally computed on a straight-line basis over the estimated service lives of the various classes of assets. Depreciation expense expressed as a percentage of the average annual depreciable completed plant was 3.27 percent for 2000, 3.28 percent for 1999 and 3.23 percent for 1998.

#### **Decommissioning costs**

TVA recognizes as incurred all obligations related to closure and removal of its nuclear units. Earnings from decommissioning investments, amortization of the decommissioning regulatory asset and interest expense on the decommissioning liability are deferred (see note 9 — Decommissioning costs).

In 2000 TVA performed calculations in accordance with Nuclear Regulatory Commission (NRC) revised guidelines. The studies resulted in a \$209 million decrease in TVA's required decommissioning obligation which was recorded along with a corresponding reduction in the regulatory asset.

#### Allowance for funds used during construction

TVA capitalizes an allowance for funds used during construction. The allowance is applicable to construction in progress, excluding deferred nuclear generating units.

#### Other deferred charges

Other deferred charges primarily include prepaid pension costs and regulatory assets capitalized under the provisions of Statement of Financial Accounting Standards (SFAS) No. 71, Accounting for the Effects of Certain Types of Regulation.

#### Regulatory assets

At September 30, 2000, other deferred charges included total unamortized regulatory assets of \$372 million of which \$228 million represents a transition obligation for certain postemployment benefits and \$144 million represents an additional obligation related to the closure and removal of nuclear units (see note 1—Decommissioning costs). At September 30, 1999, the unamortized balances of regulatory assets of \$968 million included \$343 million representing a transition obligation for certain postemployment benefits; \$393 million representing an additional obligation related to the closure and removal of nuclear units (see note 1—Decommissioning costs); \$221 million representing an overmarket portion of nuclear fuel; and \$11 million representing TVA's portion of the costs for decommissioning the DOE's uranium enrichment facilities.

Effective for 1999 TVA reclassified an additional \$332 million from nuclear fuel inventory to deferred charges. This regulatory asset was fully amortized in 2000 (see note 1 — Accelerated amortization). The effect of this change was to increase 1999 expense by approximately \$111 million and to increase 2000 expense by approximately \$221 million.

#### Accrual for nuclear refueling outage costs

Also effective for 1999 TVA changed its method of accounting for nuclear refueling outage maintenance costs whereby such costs are deferred and amortized on a straight-line basis over the estimated period until the next refueling outage, rather than expensed as incurred. The effect of this change was to decrease 2000 and 1999 expense by \$11 million and \$63 million, respectively.

#### **Investment funds**

Investment funds consist primarily of trust funds designated to fund nuclear decommissioning requirements (see note 9 - Decommissioning costs). These funds are invested in portfolios of securities generally designed to earn returns in line with overall equity market performance.

#### Debt issue and reacquisition costs

Effective for 1999 TVA changed its method of amortizing debt issue and reacquisition costs. Under the current policy, debt issue and reacquisition expenses, call premiums and other related costs are deferred and amortized (accreted) on a pooled straight-line basis over the weighted average life of TVA's debt portfolio.

Prior to 1999 debt issue and reacquisition costs were separately amortized on a straight-line basis over the term of the related outstanding securities. The effect of the change was to decrease 2000 and 1999 expense approximately \$23 million and \$20 million, respectively.

TVA has incurred premiums related to certain advanced refundings and also received and paid premiums in connection with the monetization of certain call provisions. In accordance with regulatory practices, TVA has deferred these premiums and is amortizing such premiums on a pooled straight-line basis over the weighted average life of TVA's debt portfolio. The unamortized balances of such regulatory assets at September 30, 2000 and 1999 were \$607 million and \$641 million, respectively.

#### Tax-equivalents

The TVA Act requires TVA to make payments to states and local governments where the power operations of the corporation are conducted. The amount is 5 percent of gross revenues from the prior year's sale of power, excluding sales to other Federal agencies and interchange sales with other utilities, with a provision for minimum payments under certain circumstances.

#### Accelerated amortization

Effective for 1999 TVA adopted a new accounting policy whereby annual provisions for amortization of deferred charges will be adjusted as necessary in order to achieve certain earnings levels as set forth in resolutions adopted annually by the TVA Board of Directors in connection with the rate review process. The targeted earnings levels will be based on the earnings requirements of the TVA Act and the Basic TVA Power Bond Resolution (see note 5 — Borrowing authority). Such adjustments may result in either contracting or extending the estimated amortization periods. The amortization of such assets is principally computed on a straight-line basis, over periods ranging from three to 15 years. As a result of surplus earnings levels in 2000 and 1999, TVA accelerated amortization of certain regulatory assets by \$121 million and \$261 million, respectively, under the policy.

#### Interest and capital costs

During 2000, 1999 and 1998 cash paid for interest on outstanding indebtedness (net of amount capitalized) was \$1,669 million, \$1,740 million and \$1,886 million, respectively. In addition to paying interest on outstanding indebtedness, the TVA Act requires TVA to make annual payments to the U.S. Treasury. The annual Treasury payments represent a repayment of the original appropriation investment, along with a return on the appropriation investment (see note 4).

#### **Risk-management activities**

TVA is exposed to market risk from changes in interest rates and currency exchange rates. To manage volatility relating to these exposures, TVA has entered into various derivative transactions, principally an interest rate swap agreement and foreign currency swap agreements (see note 5—Foreign currency transactions and interest rate swap). TVA is exposed to credit losses in the event of nonperformance by counterparties on the risk-management instruments. TVA monitors such risk and does not believe that there is a significant risk of nonperformance by any of the parties of these instruments. TVA's risk management policies allow the use of derivative financial instruments to manage financial exposures, but prohibit the use of these instruments for speculative or trading purposes.

TVA may engage in hedging activities using forwards, futures or options to hedge the impact of market fluctuations on energy commodity prices. As of September 30, 1999, TVA accounted for these transactions using the deferral method, and gains and losses were recognized in the accompanying financial statements when the related hedged transaction occurred. Effective October 1, 2000, TVA adopted SFAS No. 133, Accounting for Derivative Instruments and Hedging Activities, which requires that derivatives be reported at their fair market value on the statement of financial position. Qualifying derivative contracts consisted of

various purchased option contracts and certain currency and interest rate swap agreements (see note 5—Foreign currency transactions and interest rate swap). In accordance with SFAS No. 133, these contracts qualify for cash-flow hedge treatment. Accordingly, the effective portion of gains and losses related to such contracts is reported in accumulated other comprehensive income, while the ineffective portion is recognized through the creation of a regulatory asset/liability. As of October 1, 2000, TVA determined the effective portion of the gains related to the derivative contracts to be approximately \$51 million, which was recorded as a cumulative-effect type transition adjustment of accumulated other comprehensive income and approximately \$0.3 million related to the ineffective portion (loss), which was recorded as a regulatory liability.

#### Cash and cash equivalents

Cash and cash equivalents include the cash available in commercial bank accounts and U.S. Treasury accounts, as well as short-term securities held for the primary purpose of general liquidity. Such securities mature within three months from the date of acquisition.

#### Insurance

TVA is primarily self-insured for property loss, workers' compensation, general liability and automotive liability. TVA is also self-insured for health care claims for eligible active and retired employees. Consulting actuaries assist TVA in determining certain liabilities for self-insured claims. TVA maintains nuclear liability insurance and nuclear property, decommissioning and decontamination insurance with an outside party (see note 9—Nuclear insurance).

#### Management estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the related amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

#### Other

Certain reclassifications have been made to the 1998 and 1999 financial statements to conform to the 2000 presentation.

#### 2. NUCLEAR POWER PROGRAM

The nuclear power program at September 30, 2000, consists of nine units — five operating, three deferred and one inoperative — at four locations, with investments in property, plant and equipment as follows and in the status indicated:

	Operating units	Installed capacity (megawatts)		Construction in progress	Deferred	Fuel investment			
		(dollars in millions)							
Browns Ferry*	2	2,380	\$ 2,995	\$ 25	\$ —	\$168			
Sequoyah	2	2,442	1,920	44	_	125			
Watts Bar	1	1,270	6,237	14	1,719	68			
Bellefonte	_	_	_	_	4,606	_			
Raw materials	_					18			
Total	5	6,092	\$11,152	\$ 83	\$6,325	\$379			

<sup>\*</sup> Browns Ferry 1, an inoperative unit, is discussed below.

Browns Ferry 1 was taken off-line in 1985 for modifications and improvements and will continue to remain in an inoperative status until its ultimate disposition is determined. The undepreciated cost of Browns Ferry 1 of \$60 million is included in net completed plant and is being depreciated as part of the recoverable cost of the plant over the remaining license period.

TVA has three units in deferred status. In 1988 TVA suspended construction activities on Watts Bar 2, and the unit is currently in lay-up. Bellefonte 1 and 2 were deferred in 1988 and 1985, respectively. Estimated 2001 expenditures for the three deferred units are limited to lay-up, maintenance and ensuring that options remain viable.

In December 1994 TVA determined it will not, by itself, complete Bellefonte 1 and 2 and Watts Bar 2 as nuclear units. TVA's integrated resource planning process identified as a viable option the conversion of the Bellefonte facility to a combined-cycle plant utilizing natural gas or gasified coal. In 1997 an independent team of technical and financial experts completed a feasibility study to evaluate options for the conversion of the Bellefonte Nuclear Plant to a fossil fuel-fired plant. The feasibility study concluded that one of the most economical fossil conversion strategies is to complete Bellefonte as a natural gas-fired combined-cycle plant. TVA also issued an Environmental Impact Statement (EIS) assessing the environmental impacts of various fossil conversion options. The EIS identified the natural gas-fired combined-cycle plant alternative as the preferred option. Bellefonte remains in a deferred status.

While the future decisions on TVA's deferred units will ultimately impact the method of cost recovery, the TVA Board has determined that it will establish rate adjustments and operating policies to seek full recovery of the cost of these units and compliance with the requirements of the TVA Act.

#### 3. COMPLETED PLANT — POWER PROGRAM

Completed plant of the power program consists of the following at September 30:

	2000			1999			
	Cost	Accumulated depreciation	Net	Cost	Accumulated depreciation	Net	
			(in mi	llions)			
Fossil plants	\$ 8,150	\$3,616	\$ 4,534	\$ 7,983	\$3,407	\$ 4,576	
Nuclear plants	14,719	3,567	11,152	14,705	3,142	11,563	
Transmission	3,473	1,154	2,319	3,384	1,091	2,293	
Hydro plants	1,517	536	981	1,486	514	972	
Other	2,298	647	1,651	2,011	608	1,403	
Total	\$30,157	\$9,520	\$20,637	\$29,569	\$8,762	\$20,807	

#### 4. APPROPRIATION INVESTMENT — POWER PROGRAM

The TVA Act requires TVA to make annual payments to the U.S. Treasury from net power proceeds as a return on the appropriations investment in the power system and as a repayment of that investment. The payments required by the TVA Act may be deferred under certain circumstances for not more than two years. TVA paid \$20 million each year for 2000, 1999 and 1998 as a repayment of the appropriation investment. In addition, TVA paid \$34 million to the U.S. Treasury in 2000 as a return on the appropriation investment, while paying \$37 million in 1999 and \$40 million in 1998. The return is based on the appropriation investment as of the beginning of the year and the computed average interest rate payable by the U.S. Treasury on its total marketable public obligations as of the same date (6.34 percent at September 30, 1999).

#### 5. DEBT

#### **Borrowing authority**

The TVA Act authorizes TVA to issue bonds, notes and other evidences of indebtedness up to a total of \$30 billion outstanding at any one time. TVA must meet certain financial tests that are contained in the TVA Act and the Basic TVA Power Bond Resolution. Debt service on these obligations, which is payable solely from TVA's net power proceeds, has precedence over the payment to the U.S. Treasury described in note 4.

#### Short-term debt

The weighted average rates applicable to short-term debt outstanding in the public market as of September 30, 2000 and 1999, were 6.53 percent and 5.30 percent, respectively. During 2000, 1999 and 1998 the maximum outstanding balances of short-term borrowings held by the public were (in millions) \$3,943, \$4,701 and \$2,914, respectively, and the average amounts (and weighted average interest rates) of such borrowings were approximately (in millions) \$2,628 (5.94 percent), \$1,945 (5.01 percent) and \$2,234 (5.58 percent), respectively.

#### Put and call options

Bond issues of \$7.3 billion held by the public are redeemable in whole or in part, at TVA's option, on call dates ranging from the present to July 2020 at call prices ranging from 100 percent to 106.7 percent of the principal amount. Additionally, TVA has bond issues of \$3.1 billion held by the public that are redeemable in whole or in part at the option of the respective bondholders as follows. One bond issue totaling \$500 million, which matures in July 2045, is redeemable in 2001 by the bondholders. A second issue totaling \$121 million, which matures in April 2036, is redeemable in 2006 at the option of the bondholders. A third issue totaling \$1.5 billion, which matures in April 2036, is redeemable in 2006 at the option of the bondholders, and a fourth issue totaling \$1.0 billion, which matures in May 2012, is redeemable in 2002 at the option of the bondholders. Each of these four issues is reported in the debt schedule with maturity dates corresponding to the earliest redeemable dates. Six additional issues totaling \$500 million, with maturity dates ranging from 2005 to 2030, include a provision for a right of redemption upon the death of a beneficial owner in certain specified circumstances.

Additionally, TVA has two issues of Putable Automatic Rate Reset Securities (PARRS) outstanding. The bonds permit TVA, after a fixed-rate period of five years, to reset the coupon rate downward under certain market conditions. Investors have the option to redeem the bonds at par if and when the interest rate is reset. One PARRS issue totals \$575 million, matures in June 2028 and has its first potential reset date in June 2003. The second issue of PARRS totals \$525 million, matures in May 2029 and has its first potential reset date in May 2004.

#### Foreign currency transactions and interest rate swap

During 1996 TVA entered into a currency swap contract as a hedge for a foreign currency denominated debt transaction. TVA issued DM1.5 billion of bonds and swapped the cash flows for those of a U.S. dollar obligation of \$1 billion. TVA also entered into a currency swap contract during 1999 as a hedge for a Sterling denominated debt transaction where TVA issued £200 million of bonds in that transaction. Any gains or losses on the debt instruments due to the foreign currency transactions are offset by losses or gains on the swap contracts. At September 30, 2000 and 1999, the currency transactions resulted in net deferred gains of \$360 million and \$182 million, respectively, which are included in the account "unamortized discount and other adjustments." The offsetting losses on the swap contracts are recorded as a deferred liability. If any loss/(gain) were to be incurred as a result of the early termination of a swap contract, any resulting charge/(income) would be amortized over the remaining life of the bond as a component of interest expense.

Additionally, in 1997 TVA issued \$300 million of inflation-indexed accreting principal bonds. The 10-year bonds have a fixed coupon rate that is paid on the inflation-adjusted principal amount. TVA hedged its inflation exposure under the securities through a 10-year fixed interest rate swap agreement.

Debt outstanding at September 30, 2000 and 1999, consists of the following:

	2000	1999
	(in mi	llions)
Short-term debt		
Discount notes (net of discount)	\$ 1,274	\$ 982
Current maturities of long-term debt — 5.00% to 6.50%	2,350	1,000
Total short-term debt	3,624	1,982
Long-term debt		
Senior		
Maturing in 2001 — 5.00% to 6.50%	_	2,350
Maturing in 2002 — 6.00%	2,000	1,000
Maturing in 2003 — 6.125%	1,250	1,250
Maturing in 2004 — 5.00%	400	400
Maturing in 2005 — 6.375% to 7.150%	2,065	2,000
Maturing in years 2006 through 2044 — 5.375% to 8.250%	15,546	16,294
Subordinated		
Maturing in 2045 and 2046 — 7.50% to 8.00%	1,100	1,100
Total long-term debt	22,361	24,394
Unamortized discount and other adjustments	(608)	(491)
Net long-term debt	21,753	23,903
Total debt	\$25,377	\$25,885

#### 6. FAIR VALUE OF FINANCIAL INSTRUMENTS

TVA uses the methods and assumptions described below to estimate the fair values of each significant class of financial instrument. The fair market value of the financial instruments held at September 30, 2000, may not be representative of the actual gains or losses that will be recorded when these instruments mature or if they are called or presented for early redemption.

#### Cash and cash equivalents and short-term debt

The carrying amount approximates fair value because of the short-term maturity of these instruments.

#### **Investment funds**

At September 30, 2000, these investments were classified as trading securities and carried at their fair value.

#### Loans and other long-term receivables

Fair values for these homogeneous categories of loans and receivables are estimated by determining the present value of future cash flows using a discount rate equal to lending rates for similar loans made to borrowers with similar credit ratings and for the same remaining maturities.

#### Long-term debt

Fair value of long-term debt traded in the public market is determined by multiplying the par value of the bonds by the quoted market price (asked price) nearest the balance sheet date.

#### Other financing obligations

In September 2000 TVA received approximately \$300 million in proceeds by entering into a lease-lease back transaction for eight new peaking combustion turbine units. Due to the nature of the recent refinancing transaction, the carrying amount of the obligation and fair market value are equal.

The estimated values of TVA's financial instruments at September 30 are as follows:

	200	0	1999			
	Carrying amount	Fair amount	Carrying amount	Fair amount		
		(in m				
Cash and cash equivalents	\$ 361	\$ 361	\$ 160	\$ 160		
Investment funds	840	840	731	731		
Loans and other long-term receivables	176	176	153	153		
Short-term debt	1,274	1,274	982	982		
Long-term debt, including current						
maturities	24,711	23,840	25,394	24,598		
Other financing obligations	300	300	_	_		

#### 7. BENEFIT PLANS

#### Pension plan

TVA has a defined benefit plan for most annual employees that provides two benefit structures: the Original Benefit Structure and the Cash Balance Benefit Structure. The plan is controlled and administered by a legal entity separate from TVA, the TVA Retirement System (TVARS), which is governed by its own independent board of directors. The plan assets are primarily stocks and bonds. TVA contributes to the plan such amounts as are agreed upon between the TVA and the TVARS boards of directors, which in no event is less than the amount necessary on an actuarial basis to provide assets sufficient to meet obligations for benefits. No TVA contribution is legally required when the plan's assets are sufficient to meet its accrued liabilities, as determined by an independent outside actuary. This situation has existed for several years.

The pension benefit for a member participating in the Original Benefit Structure is based on the member's years of creditable service, average base pay for the highest three consecutive years and the pension factor for the member's age and years of service, less a Social Security offset.

The pension benefit for a member participating in the Cash Balance Benefit Structure is based on credits accumulated in the member's account and member's age. A member's account receives credits each pay period equal to 6.0 percent of his or her straight-time earnings. The account also increases at an interest rate equal to the change in the Consumer Price Index (CPI) plus 3.0 percent, which amounted to 5.8 percent in 1998. During 1999 plan amendments were effected such that the interest rate may not be less than 6.0 percent nor more than 10.0 percent. The actual changes in the CPI for 2000 and 1999 were 2.0 percent and 1.6 percent, respectively, resulting in the minimum of 6.0 percent for each year.

TVARS also maintains a defined contribution plan, a 401(k) plan, to which TVA makes matching contributions of 25 cents on the dollar (up to 1.5 percent of pay) for members participating in the Original Benefit Structure and of 75 cents on the dollar (up to 4.5 percent of pay) for members participating in the Cash Balance Benefit Structure.

During 1999 TVA changed its accounting policy for the method of determining the market-related value of pension assets, resulting in a one-time gain of approximately \$217 million. This gain is presented on the Statement of Income under the caption "Cumulative effect of change in accounting principle."

The discount rate used to determine the actuarial present value of the projected benefit obligation was 8.0 percent in 2000, 7.5 percent in 1999 and 7.0 percent in 1998. The assumed annual rates of increase in future compensation levels for 2000, 1999 and 1998 ranged from 3.3 to 8.3 percent. The expected long-term rate of return on plan assets was 10.0 percent for 2000 and 1999 and 11.0 percent for 1998.

During 2000, plan amendments were effected such that certain pension benefits were enhanced, resulting in approximately \$250 million in additional pension plan benefit obligations.

#### Other postretirement benefits

TVA sponsors an unfunded postretirement plan that provides for nonvested contributions toward the cost of certain retirees' medical coverage. This plan formerly covered all retirees participating in the TVA medical plan, and TVA's contributions were a flat dollar amount based upon the participants' age and years of service and certain payments toward the plan costs. This plan now operates on a much more limited basis, only for certain retirees and surviving dependents who do not qualify for TVARS benefits.

During 2000 these postretirement benefits were enhanced to help covered retirees offset the cost of medical coverage, resulting in approximately \$16 million in additional postretirement benefit obligations.

The annual assumed cost trend for covered benefits is 9.0 percent in 2000, decreasing by one-half percent per year to a level of 5.0 percent in 2008 and thereafter. For 1999 and 1998, annual trend rates of 9.5 percent and 10.0 percent, respectively, were assumed. The effect of the change in assumptions of the cost basis was not significant. Increasing/(reducing) the assumed health-care cost trend rates by 1 percent would increase/ (reduce) the accumulated postretirement benefit obligation (APBO) as of September 30, 2000, by \$9 million/(\$8 million) and the aggregated service and interest cost components of net periodic postretirement benefit cost for 2000 by \$2 million/(\$1 million).

The weighted average discount rate used in determining the APBO was 8.0 percent for 2000, 7.5 percent for 1999 and 7.0 percent for 1998. Any net unrecognized gain or loss resulting from experience different from that assumed or from changes in assumptions, and which is in excess of 10 percent of the APBO, is amortized over the average remaining service period of active plan participants.

#### Other postemployment benefits

Other postemployment benefits include workers' compensation provided to former or inactive employees, their beneficiaries and covered dependents for the period after employment but before retirement. Adoption of SFAS No. 112, *Employers Accounting for Postemployment Benefits*, in 1995 changed TVA's method of accounting practice from recognizing costs as benefits are paid to accruing the expected costs of providing these benefits. In connection with the adoption of SFAS No. 112 and related approval by its Board of Directors, TVA recorded the transition obligation as a regulatory asset. The regulatory asset is being amortized over approximately 15 years, whereby the annual expense will approximate the expense that would have been recorded on an as-paid basis. In 2000 TVA accelerated amortization of the regulatory asset approximately \$80 million in accordance with its accounting policy as previously described (see note 1—Accelerated amortization).

The components of pension expense and other postretirement benefits expense for the years ended September 30 are:

		Pen	Pension Benefits			Other Postretirement Benefits	
		2000	)	1999	2000	1999	
			(in millio				
Change in benefit obligation							
Benefit obligation at beginning of year		. \$ 5,0	31 \$	5,645	\$ 151	\$ 206	
Service cost			76	94	5	5	
Interest cost			67	374	11	14	
Plan participants' contributions			32	34	_	_	
Amendments, including other events			50	_	16	(48)	
Actuarial (gain)/loss			20	(853)	(33)	(3)	
Net transfers to variable fund/401(k) plan			23)	(1)	_	<del>-</del>	
Expenses paid		7	(3)	(3)	_		
Benefits paid			89)	(259)	(17)	(23)	
_							
Benefit obligation at end of year	• • • • • • •	. \$ 5,4	61 \$	5,031	\$ 133	\$ 151	
Change in plan assets							
Fair value of plan assets at beginning of year		. \$ 6,8	42 \$	5,968	\$ —	\$ —	
Adjustment to reconcile to system asset value			13)	5	_	_	
Actual return on plan assets		. 7	64	1,098	_		
Plan participants' contributions			32	34	_		
Net transfers to variable fund/401(k) plan		. (	23)	(1)	_	_	
Employer contributions			3		17	23	
Expenses paid			(4)	(3)	_	_	
Benefits paid			89)	(259)	(17)	(23)	
Fair value of plan assets at end of year				6,842	\$	\$	
			_ =		Ψ	Ψ	
Funded status				1,811	\$(133)	\$(151)	
Unrecognized net actuarial (gain)/loss				(1,540)	(32)	1	
Unrecognized prior service cost		4	.92	266	(48)	<u>(70</u> )	
Prepaid (accrued) benefit cost		. \$ 6	94 \$	537	\$(213)	\$(220)	
			<u> </u>				
	Don	sion Benef	Gtc.	Othe	er Postreti Benefits		
	2000	1999	1998	2000	1999	1998	
			(in mi				
Components of net periodic benefit cost			`	,			
Service cost	\$ 76	\$ 94	\$ 67	\$ 5	\$ 5	\$ 8	
Interest cost	367	374	328	11	14	26	
Expected return on plan assets	(602)	(591)	(479			n/a	
Amortization of prior service cost	24	24	(4/)			117 a	
Amortization of prior service cost	<b>4</b>	24		(6	) (2)	_	
	(19)	_	_	_	_	_	
Recognized net actuarial loss							
Net periodic benefit cost	(154)	(99)	(84	) 10	17	34	
Other events		(217)	111			(121)	
Total benefits cost/(income)	<u>\$(154</u> )	<u>\$(316</u> )	\$ 27	\$ 10	\$ 17	<u>\$ (87</u> )	

## 8. MAJOR CUSTOMERS

Five municipal customers purchase power from TVA under long-term contracts, which require 10 years' notice to terminate.

These customers account for an aggregate of total power sales as follows: 27 percent for 2000 and 1999 and 29 percent for 1998.

# 9. COMMITMENTS AND CONTINGENCIES

## **Commitments**

Leases

Certain property, plant and equipment are leased under agreements with terms ranging from one to 30 years. Most of the agreements include purchase options or renewal options that cover substantially all the economic lives of the properties. Obligations under capital lease agreements in effect at September 30, 2000, total \$36 million annually through 2005, and an aggregate of \$193 million thereafter, for a total commitment of \$373 million. Of this amount, \$192 million is interest.

#### Construction Commitments

TVA has entered into approximately \$600 million in long-term commitments consisting of the purchase of generating assets of approximately \$450 million and major maintenance expenditures of \$150 million. Terms of the contracts extend into 2003.

## Fuel Purchase Commitments

TVA has entered into approximately \$4 billion in long-term commitments ranging in terms of up to six years for the purchase of coal, and approximately \$1 billion in long-term commitments ranging in terms of up to ten years for the purchase and fabrication of uranium.

# Purchased Power

TVA has entered into an agreement for the purchase of power from a 440 megawatt, lignite-fired electrical generating plant. The agreement calls for TVA to purchase the plant's output for a 30-year period beginning on the date of first generation expected in 2001. Pricing of the contract includes fixed and variable components with minimum estimated power purchases approximating \$4 billion over the life of the contract.

# **Contingencies**

# Nuclear Insurance

The Price-Anderson Act sets forth an indemnification and limitation of liability plan for the U.S. nuclear industry. All NRC licensees, including TVA, maintain nuclear liability insurance in the amount of \$200 million for each plant with an operating license. The second level of financial protection required is the industry's retrospective assessment plan, using deferred premium charges. The maximum amount of the deferred premium for each nuclear incident is approximately \$88 million per reactor, but not more than \$10 million per reactor may be charged in any one year for each incident. TVA could be required to pay a maximum of \$528 million per nuclear incident on the basis of its six licensed units, but it would have to pay no more than \$60 million per incident in any one year.

In accordance with NRC regulations, TVA carries property and decontamination insurance of \$1.06 billion at each licensed nuclear plant for the cost of stabilizing or shutting down a reactor after an accident. Some of this insurance may require the payment of retrospective premiums of up to a maximum of approximately \$16 million.

Clean Air Legislation

Title IV of the Clean Air Act Amendments (CAAA) of 1990 requires coal-fired generation units to reduce their sulfur dioxide (SO<sub>2</sub>) and nitrogen oxide (NO<sub>x</sub>) emissions in two phases in order to control acid rain. The Phase I compliance period commenced on January 1, 1995, for SO<sub>2</sub> and January 1, 1996, for NO<sub>x</sub>, while the Phase II compliance period commenced on January 1, 2000. Based on the level of emissions, 26 of TVA's 59 operating coal-fired units are classified as Phase I units, with the remaining units being Phase II units. Compliance with these requirements has resulted in substantial expenditures for the reduction of emissions at TVA's coal-fired generating plants.

TVA's strategy for complying with the 1990 CAAA includes the use of scrubbers at two fossil units and the use of lower-sulfur coal at other fossil units to reduce SO<sub>2</sub> emissions. TVA has completed all planned scrubbers and is on schedule to complete the changeover to lower-sulfer coal.

NO<sub>x</sub> reductions were required for 58 of TVA's 59 coal-fired units. The only TVA unit for which NO<sub>x</sub> reductions are not required under the 1990 CAAA is the Atmospheric Fluidized Bed Unit 10 at TVA's Shawnee Fossil Plant. The NO<sub>x</sub> reductions for the other 58 units were achieved through the installation of low-nitrogen-oxide burners (LNBs) and/or overfire air at 40 units and boiler optimization on the remaining 18 TVA units. In 1996 TVA selected an early election option for four of these 58 units, allowing the four units at John Sevier Fossil Plant to be limited to Phase I NO<sub>x</sub> levels through 2007. In 2008 these four units will have to meet lower Phase 2 NO<sub>x</sub> levels. For the remaining 54 units, TVA has elected to average NO<sub>x</sub> emissions to meet a 54 unit NO<sub>x</sub> averaging plan. This averaging plan option lets TVA optimize the cost of NO<sub>x</sub> reductions while being in full compliance with the 1990 CAAA Title IV NO<sub>x</sub> requirements. In addition to TVA's Title IV projects during 2000, TVA also completed installation of the first selective catalytic reduction system (SCR) on the TVA power system. SCRs are state-of-the-art NO<sub>x</sub> emission-control technology. Seventeen other SCRs are planned to be installed on 24 more TVA units. This follows up on a commitment TVA made to further reduce NO<sub>x</sub> emissions on its system. Installation of these SCRs will also comply with the Environmental Protection Agency's (EPA) recent section 110 State Implementation Plan NO<sub>x</sub> Reduction rule.

Expenditures related to the Clean Air projects during 2000 and 1999 were approximately \$125 million and \$77 million, respectively. The cost of the SCR strategy is estimated to be between \$800 million and \$900 million. The total cost of compliance cannot reasonably be determined at this time because of the uncertainties surrounding emerging EPA regulations, resultant compliance strategies, potential for development of new emission control technologies, court litigation and future amendments to the Clean Air Act, but the total cost could exceed \$2.5 billion.

EPA is investigating whether coal-fired utilities in the eastern U.S., including TVA, may have modified their coal-fired boilers without complying with new source review requirements. The outcome of this investigation is ongoing and uncertain. TVA contends EPA's investigation is based on a new interpretation of an old rule and that TVA has routinely maintained its power plants to ensure efficient, reliable power generation while complying with all requirements. However, EPA has issued TVA an administrative order directing TVA to put new source controls on 14 of its units and to evaluate whether more controls should be installed on other units. TVA has challenged the validity of this order and the Eleventh Circuit Court of Appeals has stayed the order pending its review. It is not possible to predict with certainty what impact implementation of EPA's order would have on TVA if TVA's challenge is unsuccessful. If EPA substantially prevails, TVA could be required to incur capital costs in excess of \$3 billion (net present value) by 2010 to 2015. Any additional controls that TVA could be required to install on units as a result of this matter would, however, also be sufficient to comply with reduction requirements that are anticipated under other air quality programs discussed above. Thus, because of the other environmental program requirements, TVA would, in any event, likely have to incur a substantial portion of the costs that might result from the EPA enforcement action, albeit the schedule for the installation of the controls could be substantially accelerated by the EPA

enforcement action. TVA fully supports the need to further reduce emissions from coal-fired plants and seeks a resolution that will not put TVA customers and the region at a disadvantage.

## Hazardous substances

The release and cleanup of hazardous substances are regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). In a manner similar to many other industries and power systems, TVA has generated or used hazardous substances over the years. TVA has been identified as a potentially responsible party with respect to four off-site disposal areas. TVA's liability at these sites has not yet been determined. In addition, TVA is currently investigating one other TVA-owned site under a state statute similar to CERCLA. TVA may have cleanup responsibilities at this site by virtue of its control of the property. TVA's potential liabilities for its share of cleanup costs at all of these sites are uncertain but are not expected to have a significant impact on TVA's financial position or results of operations.

# Pending litigation

EPA has issued TVA an administrative order directing TVA to put new source controls on 14 of its units and to evaluate whether more controls should be installed on other units. TVA has challenged the validity of this order. It is not possible to predict with certainty what impact implementation of EPA's order would have on TVA if TVA's challenge is unsuccessful. If EPA substantially prevails, TVA could be required to incur capital costs in excess of \$3 billion (net present value) by 2010 to 2015 in order to implement EPA's order.

TVA is a party to various civil lawsuits and claims that have arisen in the ordinary course of its business. Although the outcome of these other lawsuits and claims cannot be predicted with any certainty, it is the opinion of TVA counsel that the ultimate outcome should not have a material adverse effect on TVA's financial position or results of operations.

# Decommissioning costs

Provision for decommissioning costs of nuclear generating units is based on the estimated cost to dismantle and decontaminate the facilities to meet NRC criteria for license termination. The Financial Accounting Standards Board (FASB) has reached several tentative conclusions with respect to its project regarding the accounting for closure and removal of long-lived assets, including the decommissioning of nuclear generating units. Effective for 1998 TVA changed its method of accounting for decommissioning costs and related liabilities in order to comply with certain of the FASB's tentative conclusions, as well as certain rate-setting actions. The FASB issued an exposure draft in the first quarter of 2000; however, it is uncertain when a final statement will be issued and what impact it may ultimately have on TVA's financial position or results of operations.

TVA recognizes as incurred all obligations related to closure and removal of its nuclear units. The liability for closure is measured as the present value of the estimated cash flows required to satisfy the related obligation and discounted at a determined risk-free rate of interest. The charge to recognize any additional obligation is effected by adjusting the corresponding regulatory asset. Earnings from decommissioning fund investments, amortization expense of the decommissioning regulatory asset and interest expense on the decommissioning liability are deferred in accordance with SFAS No. 71, *Accounting for the Effects of Certain Types of Regulation*. In 2000 TVA performed engineering studies in accordance with NRC revised guidelines. The studies resulted in a \$209 million decrease in TVA's required decommissioning obligation, which was recorded along with a corresponding reduction in the regulatory asset. At September 30, 2000, the present value of the estimated future decommissioning cost of \$742 million is included in other liabilities; the unamortized regulatory asset of \$144 million is included in deferred charges. The decommissioning cost estimates from the 2000 study are based on prompt dismantlement and removal of the plant from service. The actual decommissioning costs may vary from the estimates because of changes in the assumed dates of

decommissioning, changes in regulatory requirements, changes in technology and changes in the cost of labor, materials and equipment.

TVA maintains an investment trust fund to provide funding for the decommissioning of nuclear power plants. As of September 30, 2000, the decommissioning trust fund investments totaled \$833 million and were invested in securities designed to achieve a return in line with overall equity market performance.

Effective November 23, 1998, the NRC amended its regulations regarding decommissioning funding. These regulations require TVA to provide financial assurance for decommissioning funding through the use of certain prescribed mechanisms such as the trust agreements with independent money managers entered into by TVA in May 1997. These new regulations did not have a material impact on TVA's financial position or results of operations.

# Cost-Based Regulation

As a regulated entity, TVA is subject to the provisions of SFAS No. 71, Accounting for the Effects of Certain Types of Regulation. Accordingly, TVA records certain assets and liabilities that result from the effects of the ratemaking process that would not be recorded under generally accepted accounting principles for nonregulated entities. Currently, the electric utility industry is predominantly regulated on a basis designed to recover the cost of providing electric power to its customers. If cost-based regulation were to be discontinued in the industry for any reason, profits could be reduced and utilities might be required to reduce their asset balances to reflect a market basis less than cost. Discontinuance of cost-based regulation would also require affected utilities to write-off their associated regulatory assets. Such regulatory assets for TVA total approximately \$979 million at September 30, 2000, along with approximately \$6.3 billion of deferred nuclear plants. Management cannot predict the potential impact, if any, of the change in the regulatory environment on TVA's future financial position and results of operations.

## 10. NONPOWER PROGRAMS

Certain TVA activities formerly referred to as "nonpower" programs provide various public services, including managing navigable river channels, providing flood control and overseeing recreation facilities. TVA's responsibilities include general stewardship of land, water and wildlife resources.

Funding for the nonpower programs had historically been primarily provided through Federal appropriations. Certain non-power program activities have also been funded by user fees and outside services revenues. In 1999 TVA received total Federal appropriations of approximately \$50 million, of which \$43 million was for stewardship activities and \$7 million was for TVA's Land Between the Lakes National Recreation Area (LBL). During 1998 TVA received total Federal appropriations of approximately \$70 million, of which \$63 million was for stewardship activities, including \$3 million for the environmental clean-up work at the Muscle Shoals, Ala., reservation, and \$7 million was for LBL. As discussed below, TVA received no Federal appropriations in 2000.

In October 1997, Congress passed legislation that directed TVA to fund essential stewardship activities related to its management of the Tennessee River system and TVA properties with power funds in the event that there were insufficient appropriations or other available funds to pay for such activities in any year. Congress did not provide any appropriations to TVA to fund such activities in 2000. Consequently, during 2000, TVA paid \$72 million for essential stewardship activities primarily with power revenues, with the remainder funded with user fees, other forms of nonpower revenues and nonpower fund balances unused in prior years. In addition, administrative jurisdiction over LBL was transferred to the Secretary of Agriculture effective October 1, 1999. TVA is responsible for certain transition costs associated with the transfer of LBL, estimated to be approximately \$7 million at September 30, 2000. TVA retains responsibility for management of the remaining nonpower assets and settlement of nonpower obligations.

At September 30, 2000, TVA had transferred \$56 million of property and equipment to the U.S. Forest Service. After this transfer the completed plant of the nonpower programs consists of multipurpose dams and other plant. At September 30, 2000, the net completed plant balances for multipurpose dams and other plant were \$683 million and \$57 million, respectively. At September 30, 1999, the net completed plant balances for multipurpose dams and other plant were \$692 million and \$112 million, respectively.

## REPORT OF INDEPENDENT ACCOUNTANTS

# To the Board of Directors of the Tennessee Valley Authority

In our opinion, the accompanying balance sheets (power program and all programs) and the related statements of income (power program), changes in proprietary capital (power program and nonpower programs), net expense (nonpower programs) and of cash flows (power program and all programs) present fairly, in all material respects, the financial position of the power program and all programs of the Tennessee Valley Authority as of September 30, 2000 and 1999, the results of operations of the power program and nonpower programs and cash flows of the power program and all programs for each of the three years in the period ended September 30, 2000, in conformity with accounting principles generally accepted in the United States. These financial statements are the responsibility of the Tennessee Valley Authority's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States and Government Auditing Standards issued by the Comptroller General of the United States, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for the opinion expressed above. We have also issued our report dated October 24, 2000, on TVA's compliance with laws and regulations and internal control over financial reporting. That report is an integral part of our audit conducted under Government Auditing Standards that should be read along with this report on the financial statements.

As discussed in note 7 to the financial statements, TVA changed its method for determining the market-related value of pension assets in 1999.

Prices derhurse Cooper LLP

PricewaterhouseCoopers LLP Knoxville, Tennessee October 24, 2000

## REPORT OF MANAGEMENT

Management is responsible for the preparation, integrity and objectivity of the financial statements of the Tennessee Valley Authority as well as all other information contained in the annual report. The financial statements have been prepared in conformity with generally accepted accounting principles applied on a consistent basis and, in some cases, reflect amounts based on the best estimates and judgments of management, giving due consideration to materiality. Financial information contained in the annual report is consistent with that in the financial statements.

The Tennessee Valley Authority maintains an adequate system of internal controls to provide reasonable assurance that transactions are executed in accordance with management's authorization, that financial statements are prepared in accordance with generally accepted accounting principles, and that the assets of the corporation are properly safeguarded. The system of internal controls is documented, evaluated and tested on a continuing basis. No internal control system can provide absolute assurance that errors and irregularities will not occur due to the inherent limitations of the effectiveness of internal controls; however, management strives to maintain a balance, recognizing that the cost of such a system should not exceed the benefits derived. No material internal control weaknesses have been reported to management.

PricewaterhouseCoopers LLP was engaged to audit the financial statements of the Tennessee Valley Authority and issue reports thereon. Its audits were conducted in accordance with generally accepted auditing standards. Such standards require a review of internal controls and an examination of selected transactions and other procedures sufficient to provide reasonable assurance that the financial statements neither are misleading nor contain material errors. The Report of Independent Accountants does not limit the responsibility of management for information contained in the financial statements and elsewhere in the annual report.

David N. Smith

Chief Financial Officer

Sautromit

and Executive Vice President of Financial Services

## **DESCRIPTION OF BONDS**

#### General

The Bonds are to be issued pursuant to authority vested in TVA by the Act and pursuant to the Basic Tennessee Valley Authority Power Bond Resolution adopted on October 6, 1960, as amended on September 28, 1976, October 17, 1989 and March 25, 1992 (the "Basic Resolution"), and the Supplemental Resolution authorizing the Bonds adopted as of February 17, 1999 (the "Supplemental Resolution" and together with the Basic Resolution, the "Resolutions"). TVA has entered into a Fiscal Agency Agreement dated as of October 7, 1997 (the "Fiscal Agency Agreement") with the U.S. Federal Reserve Banks, as fiscal agents (together, the "Fiscal Agent"). The U.S. Secretary of the Treasury has approved the time of issuance of, and the maximum rate of interest to be borne by, the Bonds in compliance with Section 15d(c) of the Act. The Bonds represent obligations of TVA payable solely from TVA's Net Power Proceeds and are not obligations of, or guaranteed by, the United States of America.

The Act authorizes TVA to issue and sell bonds, notes and other evidences of indebtedness (hereinafter collectively referred to as "Evidences of Indebtedness") to assist in financing its power program and to refund such Evidences of Indebtedness. Evidences of Indebtedness issued pursuant to Section 2.2 of the Basic Resolution designated as Tennessee Valley Authority Power Bonds are herein referred to as "Power Bonds." The aggregate amount of Evidences of Indebtedness at any one time outstanding is limited to U.S.\$30 billion. As of September 30, 2000, TVA had approximately U.S.\$24.7 billion, DM 1.5 billion (issued in September 1996) and £200 million (issued in December 1998) of Evidences of Indebtedness outstanding. At the time TVA issued the DM and British pound sterling Evidences of Indebtedness, TVA entered into currency swap agreements to hedge against fluctuations in such currencies. For information with respect to TVA's Power Bonds and the Basic Resolution, see "The Basic Resolution; Power Bonds, Discount Notes and Other Indebtedness" — "Issuance of Additional Bonds and Other Evidences of Indebtedness" in the current Information Statement.

The summaries herein of certain provisions of the Act, the Resolutions and the Fiscal Agency Agreement do not purport to be complete and are qualified in their entirety by reference to all the provisions of the Act, the Resolutions and the Fiscal Agency Agreement, copies of which may be obtained upon written request directed to Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, Tennessee 37902-1401, Attention: Senior Vice President and Treasurer, or by calling (865) 632-3366 in the United States.

The Bonds will be Power Bonds as defined above and will be payable as to both principal and interest solely from TVA's Net Power Proceeds, which are defined as the remainder of TVA's Gross Power Revenues (as defined in the Basic Resolution) after deducting the costs of operating, maintaining and administering its power properties (including multiple-purpose properties in the proportion that multiple-purpose costs are allocated to power) and payments to states and counties in lieu of taxes, but before deducting depreciation accruals or other charges representing the amortization of capital expenditures, plus the net proceeds of the sale or other disposition of any Power Facility (as defined in the Basic Resolution) or interest therein. The Act also requires TVA to make certain payments to the U.S. Treasury each year from Net Power Proceeds in excess of those required for debt service as a return on and reduction of the Appropriation Investment (as defined in the Basic Resolution). See "Certain Provisions of the Tennessee Valley Authority Act" — "Payments to the Treasury" in the current Information Statement.

The Bonds rank equally as to the application of Net Power Proceeds with all other Power Bonds. As to the application of Net Power Proceeds, Power Bonds currently rank senior to other Evidences of Indebtedness as to principal and on parity with or senior to other Evidences of Indebtedness as to interest. At some future date prior to maturity of the Bonds, TVA may issue Evidences of Indebtedness other than Power Bonds that rank on parity with the Bonds as to principal. For a further discussion of the application of Net Power Proceeds, see "Certain Provisions of the Tennessee Valley Authority Act" and "The Basic Resolution; Power Bonds, Discount Notes and Other Indebtedness" — "Application of Net Power Proceeds" and — "Fourth Amendatory Resolution to the Basic Resolution" in the current Information Statement.

There is no limit on other indebtedness or securities which may be issued by TVA and no financial or similar restrictions on TVA, except as provided under the Act, the Basic Resolution and the Supplemental Resolution. TVA issues its Discount Notes pursuant to Section 15d of the Act and in accordance with

Section 2.5 of the Basic Resolution. TVA may also issue Other Indebtedness in addition to Power Bonds and Discount Notes. Other Indebtedness, such as TVA's Quarterly Income Debt Securities, are issued pursuant to Section 15d of the Act and under appropriate authorizing resolutions. See "The Basic Resolution; Power Bonds, Discount Notes and Other Indebtedness" in the current Information Statement.

In accordance with Public Law No. 105-62, enacted in 1997, TVA is required, in the absence of sufficient appropriations, to fund nonpower programs that constitute "essential stewardship activities" with revenues derived from one or more of various sources, including power program revenues, notwithstanding provisions of the Act and Resolutions to the contrary. See the discussion of Public Law No. 105-62 in "The Basic Resolution: Power Bonds, Discount Notes and Other Indebtedness" — "Recent Legislation" in the current Information Statement. Under the Supplemental Resolution, actions taken pursuant to Public Law No. 105-62 shall not be considered an event of default or breach under the Resolutions.

#### Possible Future Issuances

The Supplemental Resolution provides that, at the option of TVA, additional Bonds may be issued in one or more future installments pursuant to an amendment to the Supplemental Resolution not requiring the consent of Holders (as such term is defined under "Book-Entry System") of the Bonds. Additional Bonds so issued shall be identical in all respects to the Bonds offered hereby (except for any appropriate related changes, including changes in the issue date, issue price and interest commencement date).

# Payment of Principal and Interest

The Bonds will consist of U.S.\$1,000,000,000 aggregate principal amount of 5.625% Tennessee Valley Authority Global Power Bonds 2001 Series A Due January 18, 2011 (the maturity date being hereinafter referred to as the "Maturity Date"). The Bonds will be issued in minimum denominations of U.S.\$1,000 and integral multiples thereof in book-entry form only through the U.S. Federal Reserve Banks as described below under "Book-Entry System." Interest will be payable semiannually in arrear on January 18 and July 18 (each an "Interest Payment Date"), commencing on July 18, 2001. Such interest payments will include any interest accrued from and including January 18, 2001, or the preceding Interest Payment Date, as the case may be, to but excluding the relevant Interest Payment Date. Interest shall be computed on the basis of a 360-day year of twelve 30-day months. The Bonds will be repaid at 100 percent of the principal amount thereof, together with the interest accrued and unpaid thereon, on the Maturity Date. The Bonds are not entitled to the benefit of any sinking fund. Payments of principal and interest on the Bonds will be made on the applicable payment dates to Holders of the Bonds which are Holders as of the close of business on the Business Day preceding such payment dates, by credit of the payment amount to the Holders' accounts at the U.S. Federal Reserve Banks. The Holder and each other financial intermediary in the chain to the beneficial owner will have the responsibility of remitting payments for the accounts of their customers.

In any case in which an Interest Payment Date or the Maturity Date is not a Business Day, payment of principal or interest, as the case may be, by TVA to the Holders shall be made on the next succeeding Business Day with the same force and effect as if made on such Interest Payment Date or the Maturity Date. The term "Business Day" shall mean any day other than a Saturday or Sunday or a day on which banking institutions in New York City are authorized or required by law or executive order to be closed.

Certain certification requirements are applicable to payments of interest on the Bonds and Strips. The Holder or other persons otherwise required to withhold tax may require the beneficial owner of a Bond or Strip, as a condition of payment of amounts due with respect to such Bond or Strip, to present on a timely basis an appropriate United States Internal Revenue Service Form W-8BEN (or other appropriate form) to enable such person to determine its duties and liabilities with respect to any taxes or other charges that may be required to be deducted or withheld under U.S. law or any reporting or other requirements thereunder. See "United States Tax Matters." In the event that any withholding or other tax or information reporting requirements should be imposed by any jurisdiction, TVA has no obligation to pay additional interest or other amounts as a consequence thereof or to redeem the Bonds prior to their stated maturity.

## Redemption

The Bonds will not be subject to redemption prior to maturity.

# **Book-Entry System**

The Bonds will be issued and maintained and may be transferred only on the book-entry system of the U.S. Federal Reserve Banks in minimum principal amounts of U.S.\$1,000 and additional integral multiples thereof. The U.S. Federal Reserve Banks will maintain book-entry accounts with respect to the Bonds and will make payments, on behalf of TVA, of interest on and principal of the Bonds on the applicable payment dates by crediting Holders' accounts at the U.S. Federal Reserve Banks. The Bonds will not be exchangeable for definitive securities.

Regulations governing the use of the book-entry system for the Bonds are contained in 18 C.F.R. Part 1314. These regulations and procedures relate primarily to the registration, transfer, exchange and pledge of such obligations. The accounts of Holders on the U.S. Federal Reserve Banks book-entry system are governed by applicable operating circulars of the U.S. Federal Reserve Banks. The U.S. Federal Reserve Banks' handling of, and rights, duties and obligations with respect to, the Bonds will be governed exclusively by the applicable operating circulars of the U.S. Federal Reserve Banks, TVA's book-entry regulations and such other Federal book-entry regulations as may be applicable, notwithstanding any inconsistent procedures or requirements of any depository or organized exchange.

The Bonds may be held of record only by entities eligible to maintain book-entry accounts with the U.S. Federal Reserve Banks. Such entities whose names appear on the book-entry records of a U.S. Federal Reserve Bank as the entities for whose accounts the Bonds have been deposited are herein referred to as "Holders." A Holder is not necessarily the beneficial owner of a Bond. Beneficial owners will ordinarily hold Bonds through one or more financial intermediaries, such as banks, brokerage firms and securities clearing organizations. A Holder that is not the beneficial owner of a Bond, and each other financial intermediary in the chain to the beneficial owner, will have the responsibility of establishing and maintaining accounts for their respective customers. The rights of the beneficial owner of a Bond with respect to TVA and the U.S. Federal Reserve Banks may be exercised only through the Holder thereof. TVA and the U.S. Federal Reserve Banks will have no direct obligation to a beneficial owner of a Bond that is not also the Holder of such Bond. The U.S. Federal Reserve Banks will act only upon the instructions of Holders in recording transfers of the Bonds. See "Clearance and Settlement" with respect to entities holding Bonds through the international clearance and settlement systems.

# Stripping

At the request of a Holder, a Bond may be separated ("stripped") into its Interest and Principal Components and maintained as such on the book-entry records of the U.S. Federal Reserve Banks. The components of each stripped Bond are: each future interest payment (each an "Interest Component") and the principal payment (the "Principal Component"). Each Interest Component and the Principal Component will have a Common Code, an identifying designation and CUSIP number as listed in the "Summary of Offering" above.

A Bond may be separated into its Interest and Principal Components at any time from the issue date to but not including January 18, 2011, at the option of the Holder. A request for separation must be made to the Federal Reserve Bank of New York ("FRBNY"). Currently the FRBNY does not charge a fee for such services. Requests for separation from Euromarket participants must be directed through Euroclear or Clearstream, Luxembourg to the FRBNY. Any applicable requirements of the FRBNY governing stripping must be complied with by the Holder. See "Clearance and Settlement" — "The Clearing Systems."

For a Bond to be stripped into its Interest and Principal Components as described above, the minimum principal amount of the Bond must be U.S.\$320,000 or integral multiples thereof. This minimum principal amount is the amount, based on the stated interest rate of the Bonds, that will produce a semiannual interest payment of U.S.\$1,000 or integral multiples thereof. Interest and Principal Components will be obligations of TVA payable solely from TVA's Net Power Proceeds.

Once a Bond has been stripped into its Interest and Principal Components, the Interest and Principal Components may be maintained and transferred on the book-entry system of the U.S. Federal Reserve Banks in integral multiples of U.S.\$1,000. Payments on the Interest and Principal Components will be made on the

applicable payment dates on the related Bonds by crediting Holders' accounts at the FRBNY. At the request of a Holder and on the Holder's payment of a fee (currently the FRBNY's fee applicable to on-line bookentry securities transfers), the FRBNY will restore ("reconstitute") the unmatured Interest and Principal Components of a stripped Bond to their fully constituted form. Holders wishing to reconstitute the unmatured Interest and Principal Components of a stripped Bond to their fully constituted form must (i) produce all outstanding Interest and Principal Components for a Bond and (ii) comply with all applicable requirements of the FRBNY governing the stripping and reconstitution of securities. Only stripped Bonds with a minimum original principal amount of U.S.\$320,000 or integral multiples thereof may be reconstituted. Reconstitution requests from Euromarket participants must be directed through Euroclear or Clearstream, Luxembourg to the FRBNY.

The selling prices of the Interest and Principal Components could be at substantial discounts from their face amounts and, as a result, these components may be subject to greater interest rate volatility than the fully constituted Bonds or other obligations bearing current interest. There also may be a less liquid secondary market for such Interest and Principal Components as compared to the secondary market for the fully constituted Bonds.

The Luxembourg Stock Exchange will be notified regularly of the amount of Bonds stripped, so long as the Bonds are listed on such exchange.

## Agents

TVA has agreed, in each case subject to applicable laws and regulations and the provisions of the Fiscal Agency Agreement, the Bonds and the Resolutions, so long as the Bonds are outstanding, to maintain a Fiscal Agent and, so long as the Bonds are listed on the Luxembourg Stock Exchange, a Special Agent in Luxembourg, which will act as an intermediary between TVA and investors in the Bonds. The Fiscal Agent will be the U.S. Federal Reserve Banks. The Special Agent initially will be Kredietbank S.A. Luxembourgeoise. TVA and the Fiscal Agent may amend, modify or supplement, in any respect, or may terminate, substitute or replace, the Fiscal Agency Agreement without the consent of any Holder. In acting under the Fiscal Agency Agreement, the Fiscal Agent acts solely as a fiscal agent of TVA and does not assume any obligation or relationship of agency or trust for or with any Holder of the Bonds except as set forth in applicable operating circulars and letters of the U.S. Federal Reserve Banks. The addresses of the Fiscal Agent and the Special Agent for the Bonds are set forth on the back cover page hereof.

# Governing Law

The Fiscal Agency Agreement and the Bonds shall be governed by and construed in accordance with the laws of the State of New York, to the extent such laws are not inconsistent with U.S. federal law.

# Listing

Application has been made to list the Bonds on the Luxembourg Stock Exchange and the New York Stock Exchange. Application also has been made to list the Strips on the Luxembourg Stock Exchange.

## **Notices**

Notices and other communications will be given by transmission to a Holder through the communication system linking the U.S. Federal Reserve Banks. Notices will be deemed to have been sufficiently given or made, for all purposes, upon such transmission.

Copies of notices by TVA regarding the Bonds will also be published (a) in a leading daily newspaper in the English language and of general circulation in New York, (b) in a leading daily newspaper in the English language and of general circulation in London, and (c) so long as the Bonds are listed on the Luxembourg Stock Exchange and the rules of such Stock Exchange require, in a leading daily newspaper of general circulation in Luxembourg. It is expected that copies of such notices will normally be published in *The Wall Street Journal* in New York, *The Financial Times* in London and the *Luxemburger Wort* in Luxembourg.

## **CLEARANCE AND SETTLEMENT**

# The Clearing Systems

Clearstream Banking, société anonyme, Luxembourg ("Clearstream, Luxembourg") and Euroclear Bank as the operator of the Euroclear System ("Euroclear") each holds securities for its customers and facilitates the clearance and settlement of securities transactions by electronic book-entry transfer between their respective account holders. Euroclear and Clearstream, Luxembourg provide various services, including safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Euroclear and Clearstream, Luxembourg also deal with domestic securities markets in several countries through established depository and custodial relationships. Euroclear and Clearstream, Luxembourg have established an electronic bridge between their two systems across which their respective participants may settle trades with each other.

Euroclear and Clearstream, Luxembourg customers are world-wide financial institutions, including underwriters, securities brokers and dealers, banks, trust companies and clearing corporations. Indirect access to Euroclear and Clearstream, Luxembourg is available to other institutions that clear through or maintain a custodial relationship with an account holder of either system.

# **Initial Settlement**

On initial issue, all Bonds will be issued and settled through the U.S. Federal Reserve Banks book-entry system and held by Holders designated by the Managers. After initial issue, all Bonds will continue to be held by such Holders in the U.S. Federal Reserve Banks book-entry system unless an investor arranges for the transfer of its Bonds to another Holder.

TVA understands that investors electing to hold their Bonds through Euroclear or Clearstream, Luxembourg accounts will follow the settlement procedures applicable to conventional Eurobonds in registered form. Bonds will be credited to the securities custody accounts of Euroclear and Clearstream, Luxembourg holders on the business day following the settlement date against payment for value on the settlement date.

# **Secondary Market Trading**

With respect to secondary market trading in the Bonds, TVA understands the following procedures will apply. Transactions in the Bonds will be cleared and settled by Euromarket participants through the facilities of Euroclear and Clearstream, Luxembourg, the principal Euromarket securities clearance and settlement organizations. The Bonds may be held of record only by entities eligible to maintain book-entry accounts with the U.S. Federal Reserve Banks. Select entities will hold the Bonds in their book-entry accounts with the FRBNY, as the depositaries for Euroclear and Clearstream, Luxembourg. The identity of and certain information about the Euroclear or Clearstream, Luxembourg depositaries may be obtained by contacting Euroclear or Clearstream, Luxembourg. Transfers of the Bonds between Clearstream, Luxembourg customers or Euroclear participants and investors holding directly or indirectly through the U.S. Federal Reserve Banks book-entry system ("Fed Users") will be effected through the book-entry accounts of such depositaries as Holders with the FRBNY, thereby increasing or decreasing their respective holdings of the Bonds on behalf of Euroclear or Clearstream, Luxembourg.

Transfers between Fed Users will occur in accordance with applicable Book-Entry Regulations promulgated by the U.S. Department of the Treasury. Transfers between Clearstream, Luxembourg customers and Euroclear participants will be settled using the procedures applicable to conventional Eurobonds in same-day funds in accordance with their applicable rules and operating procedures.

Cross-market transfers between Fed Users, on the one hand, and persons holding Bonds directly or indirectly through Euroclear or Clearstream, Luxembourg, on the other, will be effected on behalf of the relevant international clearing system by its U.S. depositary; however, such cross-market transactions will require delivery of instructions to the relevant international clearing system by the system customer or

participant in accordance with the system's rules and procedures and within its established deadlines (European time). The relevant international clearing system will, if the transaction meets its settlement requirements, deliver instructions to its U.S. depositary to take action to effect final settlement on its behalf by delivering or receiving Bonds through its U.S. Federal Reserve account, and making or receiving payment in accordance with normal procedures for immediately available funds settlement. Instructions of Clearstream, Luxembourg customers and Euroclear participants with respect to such transfers must be delivered to Euroclear or Clearstream, Luxembourg, as the case may be, and not to their U.S. depositaries.

Because of time-zone differences, credits of Bonds received in Euroclear or Clearstream, Luxembourg as a result of a transaction with a Fed User will be made during the securities settlement processing for the business day following the U.S. Federal Reserve Banks book-entry system settlement date. Such securities credits will be reported to the relevant Clearstream, Luxembourg customer or Euroclear participant on such following business day with the cash debt back-valued to, and the interest accruing from, the U.S. Federal Reserve Banks book-entry system settlement date. If, however, settlement is not completed on the intended value date (that is, if the trade fails), the trade would be valued as of the actual settlement date. Cash received in Euroclear or Clearstream, Luxembourg as a result of sales of Bonds by or through a Clearstream, Luxembourg customer or a Euroclear participant to a Fed User will be received with value on the U.S. Federal Reserve Banks book-entry system settlement date but will be available in the relevant Euroclear or Clearstream, Luxembourg cash account only as of the business day following settlement on the U.S. Federal Reserve Banks book-entry system.

From a Fed User's standpoint, a cross-market transaction will settle no differently from a trade between two Fed Users.

Distributions of interest and principal with respect to the Bonds held through Euroclear or Clearstream, Luxembourg will be credited to the cash accounts of Clearstream, Luxembourg customers or Euroclear participants on the same day (European time) as payment is made to Fed Users, subject to the relevant system's rules and procedures, to the extent received and applied by its U.S. depositary. Such distributions will be subject to tax reporting in accordance with relevant United States tax laws and regulations. See "United States Tax Matters."

Although Euroclear and Clearstream, Luxembourg have agreed to the foregoing procedures in order to facilitate transfers of the Bonds among Fed Users, Euroclear and Clearstream, Luxembourg, they are under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued at any time. None of TVA, the Managers or the Fiscal Agent will have any responsibility for the performance by Euroclear or Clearstream, Luxembourg or their respective participants or customers or indirect participants or customers of their obligations under the rules and procedures governing their operations.

## LEGALITY OF INVESTMENT IN THE UNITED STATES

Each person or entity is advised to consult with its own counsel with respect to the legality of investment in the Bonds or in any stripped Interest and Principal Components thereof (see "Description of Bonds" — "Stripping"), which could be subject to restrictions or requirements with respect to the legality of investment that do not apply to Power Bonds held in their fully constituted form. Generally the following describes the legality of investment in the United States in Power Bonds in their fully constituted form.

Power Bonds are lawful investments and may be accepted as security for all fiduciary, trust and public funds, the investment or deposit of which shall be under the authority or control of any officer or agency of the United States of America. 16 U.S.C. § 831n-4(d).

Power Bonds are acceptable as collateral for U.S. Treasury tax and loan accounts pursuant to 31 C.F.R. § 203.24(d), unless specified otherwise by the U.S. Treasury.

U.S. national banks may deal in, underwrite and purchase Power Bonds for their own accounts in an amount not to exceed 10 percent of unimpaired capital and surplus. 12 U.S.C. § 24, seventh paragraph.

U.S. Federal Reserve Banks may accept Power Bonds as eligible collateral for advances to member banks. 12 U.S.C. § 347 and 12 C.F.R. § 201.108(b) (13).

U.S. federal savings associations and U.S. federal savings banks may, to the extent specified in applicable regulations, invest in Power Bonds without regard to limitations generally applicable to investments. 12 U.S.C.  $\S$  1464(c)(1)(F).

Power Bonds are eligible as collateral for advances by U.S. Federal Home Loan Banks to members for which Power Bonds are legal investments. 12 U.S.C. § 1430(a) and 12 C.F.R. § 935.9(a) (2).

U.S. federal credit unions may purchase Power Bonds, subject to applicable regulations. 12 U.S.C. § 1757(7)(E) and 12 C.F.R. Part 703.

Power Bonds are "obligations of a corporation which is an instrumentality of the United States" within the meaning of Section 7701(a)(19)(C)(ii) of the Internal Revenue Code for purposes of the 60 percent of assets limitation applicable to U.S. building and loan associations.

## UNITED STATES TAX MATTERS

# Tax Considerations Applicable to Bonds

The following summary of certain United States federal income and estate tax and certain limited state and local tax consequences (where specifically noted) of the purchase, ownership and disposition of the Bonds has been prepared by Orrick, Herrington & Sutcliffe LLP, as special U.S. tax counsel to TVA, and is based upon laws, regulations, rulings and decisions, which are subject to change at any time, possibly with retroactive effect. The discussion below does not address the tax consequences associated with stripping a Bond into its Interest and Principal Components or of the purchase, ownership or disposition of an Interest or Principal Component. For a discussion of such tax matters, see "Tax Considerations Applicable to Strips." The discussion does not address all aspects of United States federal income and estate taxation that may be relevant to a particular investor in light of its personal investment circumstances or to certain types of investors subject to special treatment under the United States federal income tax laws (for example, brokers, security dealers, traders in securities that elect to mark to market, banks, life insurance companies, tax-exempt organizations and, with limited exceptions, foreign investors), and generally does not address state and local taxation. Further, the discussion is limited to persons who will hold the Bonds as capital assets and does not deal with United States federal income tax consequences applicable to persons who will hold the Bonds in the ordinary course or as an integral part of their trade or business, or as part of a hedging, straddle, integrated or conversion transaction or persons whose functional currency is not the U.S. dollar. Furthermore, it does not address alternative minimum tax consequences or the indirect effects on the holders of equity interests in a Bondholder. Each prospective owner of a Bond is urged to consult with its own tax advisor with respect to the United States federal, state and local tax consequences associated with the purchase, ownership, and disposition of a Bond or of an Interest or Principal Component, as well as the tax consequences arising under the laws of any other taxing jurisdiction, and may not construe the following discussion as legal advice. In this regard, it should be noted that the Bonds are not subject to redemption by reason of the imposition of withholding or other tax by any jurisdiction, and TVA has no obligation to pay additional interest or other amounts if any withholding or other tax is imposed on payments on the Bonds (including any withholding tax that may be imposed as a result of a failure to provide an applicable United States Internal Revenue Service form).

For purposes of this subsection ("Tax Considerations Applicable to Bonds"), "U.S. Person" means a citizen or resident of the United States, a corporation or (except as may be provided in Treasury Regulations) partnership organized in or under the laws of the United States or any political subdivision thereof, an estate the income of which is includible in gross income for United States tax purposes regardless of its source or a trust if a United States court is able to exercise primary supervision over administration of the trust and one or more U.S. Persons have authority to control all substantial decisions of the trust. The term "U.S. beneficial owner" means a U.S. Person that is a beneficial owner of a Bond and any other person which is a beneficial

owner of a Bond that is otherwise subject to United States federal income taxation on a net basis in respect of income attributable to a Bond.

## U.S. Beneficial Owners

A U.S. beneficial owner is subject to federal income taxation on income on a Bond. The Act, however, provides that bonds issued by TVA are "exempt both as to principal and interest from all taxation now or hereafter imposed by any State or local taxing authority except estate, inheritance and gift taxes." This exemption might not extend to franchise or other nonproperty taxes in lieu thereof imposed on corporations or to gain or loss realized upon the sale or exchange of a Bond, notwithstanding that such gain might in some cases be treated as interest income for United States federal income tax purposes.

Interest on a Bond will be taxable to a U.S. beneficial owner at the time that it is received or accrued, depending upon the U.S. beneficial owner's method of accounting for United States federal income tax purposes. There is no special exemption for a Bond from United States federal income, estate and gift tax.

Upon a sale or exchange of a Bond, a U.S. beneficial owner generally will recognize capital gain or loss equal to the difference between the amount realized on the sale or exchange (not including any amounts attributable to accrued and unpaid interest) and the U.S. beneficial owner's adjusted basis for the Bond for federal income tax purposes.

If a U.S. beneficial owner purchases a Bond for less than its stated redemption price at maturity, in general, that difference will be market discount (unless the discount is less than ¼ of 1 percent of the stated redemption price at maturity of the Bond multiplied by the number of complete years remaining to maturity). In general, under the market discount rules, unless the U.S. beneficial owner elects to include market discount in income currently, any gain on a disposition of a market discount Bond will be ordinary income to the extent of accrued market discount, and deductions for some or all of the interest on any indebtedness incurred or continued to purchase or carry the Bond may be deferred until the disposition of the Bond. Any election to include market discount in income currently generally applies to all debt instruments acquired by the electing U.S. beneficial owner during or after the first taxable year to which the election applies and is irrevocable without the consent of the United States Internal Revenue Service. A U.S. beneficial owner should consult a tax advisor before making the election.

A U.S. beneficial owner who purchases a Bond for an amount greater than the amount payable at maturity of the Bond may elect to amortize the bond premium. In the case of a U.S. beneficial owner that makes an election to amortize bond premium or has previously made an election that remains in effect, amortizable bond premium on the Bond generally will be treated as a reduction of the interest income on a Bond on a constant-yield basis (except to the extent regulations may provide otherwise) over the term of the Bond. The basis of a debt obligation purchased at a premium is reduced by the amount of amortized bond premium. An election to amortize bond premium generally applies to all debt instruments (other than tax-exempt obligations) held by the electing U.S. beneficial owner on the first day of the first taxable year to which the election applies or thereafter acquired by such owner, and is irrevocable without consent of the United States Internal Revenue Service. A U.S. beneficial owner should consult a tax advisor before making the election.

A U.S. beneficial owner may elect to include in gross income all interest that accrues on a debt instrument using the constant-yield method described below under the heading "Tax Considerations Applicable to Strips." For purposes of this election, interest includes stated interest, original issue discount ("OID"), market discount, de minimis market discount and unstated interest, as adjusted by any amortizable bond premium or acquisition premium. If this election is made with respect to a debt instrument with amortizable bond premium, the electing U.S. beneficial owner will be deemed to have elected to apply amortizable bond premium against interest with respect to all debt instruments with amortizable bond premium (other than debt instruments the interest on which is excludible from gross income) held by the electing U.S. beneficial owner as of the beginning of the taxable year in which the debt instrument with respect to which the election is made is acquired or thereafter acquired. The deemed election with respect to amortizable bond premium may not be revoked without the consent of the United States Internal Revenue

Service. If this election is made with respect to a debt instrument with market discount, the electing U.S. beneficial owner will be deemed to have elected to include market discount in income currently (as discussed above) with respect to all debt instruments acquired by the electing U.S. beneficial owner during or after the first taxable year to which the election applies, which election may not be revoked without the consent of the United States Internal Revenue Service.

## Non-U.S. Beneficial Owners

Generally, a Bondholder that is not a U.S. Person and that has no connection with the United States other than holding the Bond (a "non-U.S. beneficial owner") will not be subject to United States federal withholding tax on interest paid by TVA on a Bond. To qualify for the exemption from withholding, the last U.S. Person in the chain of payment prior to payment to a non-U.S. beneficial owner (the "Withholding Agent") must have received in the year in which such a payment occurs, or in either of the two preceding years, a statement that (i) is signed by the beneficial owner under penalties of perjury, (ii) certifies that such owner is not a U.S. beneficial owner and (iii) provides the name and address of the beneficial owner. The statement may be made on a United States Internal Revenue Service Form W-8BEN or, in the case of certain non-U.S. beneficial owners, Form W-8EXP (collectively, "Form W-8") or substantially similar substitute form, and the beneficial owner must inform the Withholding Agent of any change in the information on the statement within 30 days of such change. If a Bond is held through a securities clearing organization or certain other financial institutions, the organization or institution may provide a signed statement to the Withholding Agent. However, in such case, the signed statement must be accompanied by a copy of a Form W-8 or substitute form provided by the beneficial owner to the organization or institution holding the Bond on behalf of the beneficial owner. Recently issued regulations, generally effective for payments made after December 31, 2000, subject to certain transition rules (the "New Regulations"), attempt to unify the certification requirements discussed above and to clarify reliance standards. Additionally, the New Regulations require, in the case of Bonds held by a foreign partnership, that (a) the certification described above be provided by the partners rather than by the foreign partnership and (b) the partnership provide certain information, including a United States taxpayer identification number. Prospective investors are urged to consult their own tax advisors regarding the effect and application of the New Regulations.

Generally, any amount which constitutes capital gain to a non-U.S. beneficial owner upon retirement or disposition of a Bond will not be subject to U.S. federal income taxation. Certain exceptions may be applicable and individual non-U.S. beneficial owners are particularly urged to consult a tax advisor. Generally, the Bonds will not be includible in the U.S. federal estate of a non-U.S. beneficial owner.

## Backup Withholding

Backup withholding of United States federal income tax at a rate of 31 percent may apply to payments made in respect of the Bonds to beneficial owners who are not exempt recipients and who fail to provide certain identifying information (such as the beneficial owner's taxpayer identification number) in the manner required. Generally, individuals are not exempt recipients, whereas corporations and certain other entities generally are exempt recipients. Payments made in respect of the Bonds to a U.S. beneficial owner must be reported to the United States Internal Revenue Service, unless such U.S. beneficial owner is an exempt recipient or establishes an exemption. Compliance with the identification procedures (described in the preceding section) would generally establish an exemption from backup withholding for those non-U.S. beneficial owners who are not exempt recipients.

In addition, upon the sale of a Bond to (or through) a broker, the broker must withhold at a rate of 31 percent of the reportable payment, unless either (i) the broker determines that the seller is a corporation or other exempt recipient or (ii) the seller provides, in the required manner, certain identifying information and, in the case of a non-U.S. beneficial owner, certifies that such seller is a non-U.S. beneficial owner (and certain other conditions are met). Such a sale must also be reported by the broker to the United States Internal Revenue Service, unless either (i) the broker determines that the seller is an exempt recipient or (ii) the seller certifies its non-U.S. status (and certain other conditions are met). Certification of the beneficial owner's non-U.S. status usually would be made on Form W-8 under penalties of perjury, although in certain cases it may

be possible to submit other documentary evidence. The term "broker" generally includes all persons who, in the ordinary course of a trade or business, stand ready to effect sales made by others, as well as brokers and dealers registered as such under the laws of the United States or a state. These requirements generally will apply to a United States office of a broker, and the information reporting requirements generally will apply to a foreign office of a United States broker, as well as to a foreign office of a foreign broker if the broker is (i) a controlled foreign corporation within the meaning of Section 957(a) of the Internal Revenue Code, (ii) a foreign person 50 percent or more of whose gross income from all sources for the 3-year period ending with the close of its taxable year preceding the payment (or for such part of the period that the foreign broker has been in existence) was effectively connected with the conduct of a trade or business within the United States or (iii) a foreign partnership if it is engaged in a trade or business in the United States or if 50 percent or more of its income or capital interests are held by U.S. Persons.

Generally, any amounts withheld under the backup withholding rules from a payment to a beneficial owner would be allowed as a refund or credit against such beneficial owner's United States federal income tax.

## Tax Considerations Applicable to Strips

The following discussion of the United States federal income and estate tax and certain limited state and local tax consequences (where specifically noted) of the purchase, ownership and disposition of Strips has been prepared by Orrick, Herrington & Sutcliffe LLP, as special U.S. tax counsel to TVA, and is based upon laws, regulations, rulings and decisions, which are subject to change at any time, possibly with retroactive effect. The discussion does not address all aspects of United States federal income and estate taxation that may be relevant to a particular investor in light of its personal investment circumstances or to certain types of investors subject to special treatment under the United States federal income tax laws (for example, brokers, security dealers, traders in securities that elect to mark to market, banks, life insurance companies, tax-exempt organizations and, with limited exceptions, foreign investors), and generally does not address state and local taxation. Further, the discussion is limited to persons who will hold the Strips as capital assets, and does not deal with United States federal income tax consequences applicable to persons who will hold the Strips in the ordinary course or as an integral part of their trade or business, or as part of a hedging, straddle, integrated or conversion transaction or persons whose functional currency is not the U.S. dollar. Furthermore, it does not address alternative minimum tax consequences or the indirect effects on the holders of equity interests in a holder of a Strip. Each prospective owner of a Strip is urged to consult with its own tax advisor with respect to the United States federal, state and local tax consequences associated with the purchase, ownership and disposition of a Strip, as well as tax consequences arising under the laws of any other taxing jurisdiction, and may not construe the following discussion as legal advice. In this regard, it should be noted that the Strips are not subject to redemption by reason of the imposition of withholding or other tax by any jurisdiction, and TVA has no obligation to pay additional interest or other amounts if any withholding or other tax is imposed on payments on the Strips (including any withholding tax that may be imposed as a result of a failure to provide an applicable United States Internal Revenue Service form).

For purposes of this subsection ("Tax Considerations Applicable to Strips"), "U.S. Person" means a citizen or resident of the United States, a corporation or (except as may be provided in the Treasury Regulations) a partnership organized in or under the laws of the United States or any political subdivision thereof, an estate the income of which is includible in gross income for United States tax purposes regardless of its source or a trust if a United States court is able to exercise primary supervision over administration of the trust and one or more U.S. Persons have authority to control all substantial decisions of the trust. The term "U.S. beneficial owner" means a U.S. Person that is a beneficial owner of a Strip and any other person which is a beneficial owner of a Strip that is otherwise subject to United States federal income taxation on a net basis in respect of income attributable to a Strip.

# U.S. Beneficial Owners

A U.S. beneficial owner is subject to United States federal income taxation on the income of a Strip, and there is no special exemption from United States federal income, estate and gift tax with respect to Strips. The Act provides that bonds issued by TVA are "exempt both as to principal and interest from all taxation now or

hereafter imposed by any State or local taxing authority except estate, inheritance and gift taxes." This exemption might not extend to franchise or other non-property taxes in lieu thereof imposed on corporations or to gain or loss realized upon the sale or exchange of a Bond, notwithstanding that such gain might in some cases be treated as interest income for United States federal income tax purposes. It is unclear whether this exemption applies at all to the income on a Strip. If all of the income on a Strip were to be exempt from state and local taxation, the amount of income exempted from such taxation could be in excess of the amount that would have been exempted had the Bonds not been separated into their Interest and Principal Components. It is unclear whether or not this was intended. Therefore, while it is believed that the income includible by a U.S. beneficial owner with respect to a Strip should qualify for the exemption provided in the Act at least to the extent of the rate of interest payable on the Bonds, there is no controlling precedential authority and, therefore, each owner of a Strip is urged to consult its own tax advisor as to whether or not the income of a Strip qualifies in whole or in part for the exemption provided in the Act.

A U.S. beneficial owner that elects to strip a Bond into its Interest and Principal Components and to dispose of one or more of such Components will be required to include in income all interest and market discount accrued on the Bond to the date of disposition (to the extent that such income has not previously been included in income), and the U.S. beneficial owner's basis in the Bond will be increased, immediately prior to the disposition of one of the Strips, by the amount so included in income. Upon the disposition of a Strip, the U.S. beneficial owner will be required to recognize gain or loss equal to the difference between the amount realized on the disposition of the Strip and the U.S. beneficial owner's basis in the Strip immediately prior to the disposition of one of the Strips. For purposes of determining that basis, the U.S. beneficial owner will be required to allocate its tax basis in the Bond immediately prior to the sale (as adjusted in the manner detailed above) between the Interest and Principal Components based on their respective fair market values on the date of the sale.

A U.S. beneficial owner of a Strip will accrue income on the Strip in accordance with the OID rules set forth in the United States Internal Revenue Code of 1986, as amended. In this regard, the application of the OID rules to the Strips is subject to significant uncertainty, and therefore purchasers of the Strips are urged to consult with their own tax advisors. Generally, however, it is anticipated that each U.S. beneficial owner of a Strip will be required to include in income, as OID, the difference between (1) the stated redemption price at maturity of the Interest or Principal Component owned by such person (which generally would include all payments to be made on the Component subsequent to the date that the strip was effected or, if later, the date of the U.S. beneficial owner's purchase of the Component) and (2) the U.S. beneficial owner's purchase price for the Component (or, in the case of a person who effects a strip and disposes of one or more of the Components, the portion of the person's basis in the Bond which is allocable to the retained Components, as determined pursuant to the rules set forth in the preceding paragraph).

The amount of OID on a Strip (determined as set forth above) will be includible on a constant-yield basis in the income of a U.S. beneficial owner of a Strip over the life of the Strip (excluding, with respect to certain U.S. beneficial owners, Strips having a maturity of one year or less from the date of purchase — which Strips would be subject to special OID rules which are discussed below), even in years in which the owner of the Strip does not receive any actual payment. The amount of OID that must be included in income each year by the U.S. beneficial owner of a Strip will be equal to the sum of the daily portions of the OID that accrued during each day of the year during which the U.S. beneficial owner owned the Strip. The daily portions will be determined by allocating to each day of the accrual period, as defined below, a pro rata portion of an amount equal to the adjusted issue price of the Strip at the beginning of the accrual period, also as defined below, multiplied by the yield to maturity of the Strip, determined by compounding at the close of each accrual period and properly adjusted for the length of the accrual period. For purposes of these calculations, (i) the accrual periods will, generally, be of any length and may vary in length over the term of the Strip, provided that each accrual period is no longer than a year and that each scheduled payment of principal and interest occurs either on the final day of an accrual period or on the first day of an accrual period, and (ii) the adjusted issue price of a Strip will be the U.S. beneficial owner's purchase price for the Strip (or, in the case of a person who effects a strip and disposes of one or more of the Components, the portion of the person's basis in the Bond which is allocable to the retained Components, as determined pursuant to the rules set forth above),

increased by the OID accrued by the U.S. beneficial owner in previous accrual periods and decreased by any payments received by the U.S. beneficial owner in prior accrual periods. The amount of OID allocable to an initial short accrual period may be computed using any reasonable method if all other accrual periods other than a final short accrual period are of equal length. The amount of OID allocable to the final accrual period is the difference between (x) the amount payable at the maturity of the Strip and (y) the Strip's adjusted price as of the beginning of the final accrual period. The foregoing rules will generally be applied by each Strip acquired separately. In certain circumstances, Strips acquired (or retained by the person stripping a Bond) may be treated as a single instrument for tax purposes.

In general, a cash basis U.S. beneficial owner who purchases a Strip the payment with respect to which is due not later than one year from the date of issuance ("short-term Strips") is not required to accrue OID (as determined under the special rule described below for the purposes of this paragraph) for United States federal income tax purposes unless it elects to do so. Accrual basis U.S. beneficial owners and certain other U.S. beneficial owners (including banks, regulated investment companies, dealers in securities, common trust funds, U.S. beneficial owners who hold the debt instruments as part of certain identified hedging transactions, certain pass-through entities and electing cash basis U.S. beneficial owners) who purchase a short-term Strip and any U.S. beneficial owners who strip a Bond into its Interest and Principal Components and who retain one or more such Components are required to accrue OID on short-term Strips on either a straight-line basis or under the constant-yield method (based on daily compounding), at the election of the U.S. beneficial owner. In the case of a U.S. beneficial owner not required and not electing to include OID on a short-term Strip in income currently, any gain realized on the sale or retirement of the short-term Strip will be ordinary income to the extent of the OID accrued on a straight-line basis (unless an election is made to accrue the OID under the constant-yield method) through the date of sale or retirement. U.S. beneficial owners who are not required and who do not elect to accrue OID on short-term Strips will be required to defer deductions for interest on borrowings allocable to short-term Strips in an amount not exceeding the deferred income until the deferred income is realized.

Upon the sale or exchange of a Strip, a U.S. beneficial owner generally will recognize capital gain or loss equal to the difference between the amount realized on the sale or exchange and the U.S. beneficial owner's adjusted tax basis in the Strip. A U.S. beneficial owner's adjusted tax basis in a Strip will generally be its cost, increased by the amount of the OID included in the U.S. beneficial owner's income with respect to the Strip.

TVA is selling the Bonds (and not Strips) to the Managers; it is possible, however, that the Managers may elect to strip the Bonds and sell Interest and Principal Components (as well as Bonds) immediately upon their acceptance of the Bonds. Such Strips might be viewed, for United States federal income tax purposes, as OID bonds issued by TVA to the purchasers of the Strips. If the United States Internal Revenue Service were to characterize the transaction in this fashion, the rules set forth above would generally apply to the Bonds stripped by the Managers, except that (1) the amount of OID on each Strip so sold would be measured, and the adjusted issue price would be determined, by reference to the first price at which a substantial amount of each Strip was sold, rather than by reference to the price paid by the purchaser for the Strip (not only in the case of an initial purchaser of the Strip, but also in the case of any transferee thereof) and (2) the stated redemption price at maturity would be determined by reference to all payments to be made on the Strip subsequent to the date of the closing relating to the Bonds offered hereby rather than by reference to the payments to be made subsequent to the U.S. beneficial owner's acquisition of the Strip. Each U.S. beneficial owner is urged to consult with its own tax advisor as to the likelihood of such a characterization, as well as to the application of the "acquisition premium" and "market discount" rules which would apply to those Bonds stripped by the Managers if the transaction were to be so characterized.

Recombinations. The OID rules are also unclear as to the treatment of a U.S. beneficial owner who acquires a Principal Component and all the associated Interest Components; it is believed, however, that such a person would not treat the Components as a Bond, but would instead recognize income on each of the Components in the manner detailed above. However, if such a person requests the FRBNY to reconstitute the Components into a Bond and that Bond is then sold to another person, it is believed that the new purchaser would be treated as having acquired a Bond (rather than Interest and Principal Components) with the result

that the rules set forth above, under "Tax Considerations Applicable to Bonds," would apply. Each purchaser of a Strip is urged to consult its own tax advisor as to this issue.

## Non-U.S. Beneficial Owners

A non-U.S. beneficial owner of a Strip will not be subject to United States federal withholding tax on TVA's payment of income on a Strip provided that the Withholding Agent has received in the year in which such payment occurs, or in either of the two preceding years, a statement that (i) is signed by the beneficial owner under penalties of perjury, (ii) certifies that such owner is a non-U.S. beneficial owner and (iii) provides the name and address of the beneficial owner. The statement may be made on an United States Internal Revenue Service Form W-8BEN or in the case of certain non-U.S. beneficial owners, Form W-8EXP (collectively, "Form W-8") or substantially similar substitute form, and the beneficial owner must inform the Withholding Agent of any change in the information on the statement within 30 days of such change. If a Strip is held through a securities clearing organization or certain other financial institutions, the organization or institution may provide a signed statement to the Withholding Agent. However, in such case, the signed statement must be accompanied by a Form W-8 or substitute form provided by the beneficial owner to the organization or institution holding the Strip on behalf of the beneficial owner. Recently issued regulations, generally effective for payments made after December 31, 2000, subject to certain transition rules (the "New Regulations"), attempt to unify the certification requirements discussed above and to clarify reliance standards. Additionally, the New Regulations require, in the case of Strips held by a foreign partnership, that (a) the certification described above be provided by the partners rather than by the foreign partnership and (b) the partnership provide certain information, including a United States taxpayer identification number. Prospective investors are urged to consult their own tax advisors regarding the effect and application of the New Regulations.

Generally, any amount which constitutes capital gain to a non-U.S. beneficial owner upon retirement or disposition of a Strip will not be subject to United States federal income taxation. Certain exceptions may be applicable and individual non-U.S. beneficial owners are particularly urged to consult their own tax advisors.

Generally, the Strips will not be includible in the U.S. federal estate of a non-U.S. beneficial owner.

# Backup Withholding

Backup withholding of United States federal income tax at a rate of 31 percent may apply to payments made in respect of the Strips to beneficial owners of the Strips that are not "exempt recipients" and that fail to provide certain identifying information (such as taxpayer identification number) to the Withholding Agent at the time and in the manner required. Such backup withholding may also apply in the case of payments made upon the disposition of a Strip. Individuals generally are not exempt recipients, whereas corporations and certain other entities are generally exempt recipients. Compliance with the identification procedures described in the preceding section would generally establish an exemption from backup withholding for those non-U.S. beneficial owners who are not exempt recipients.

In addition, upon the sale of a Strip to (or through) a broker, the broker must withhold at a rate of 31 percent of the reportable payment, unless either (i) the broker determines that the seller is a corporation or other exempt recipient or (ii) the seller provides, in the required manner, certain identifying information and, in the case of a non-U.S. beneficial owner, certifies that such seller is a non-U.S. beneficial owner (and certain other conditions are met). Such a sale must also be reported by the broker to the Internal Revenue Service, unless either (i) the broker determines that the seller is an exempt recipient or (ii) the seller certifies its non-U.S. status (and certain other conditions are met). Certification of the beneficial owner's non-U.S. status usually would be made on Form W-8 under penalties of perjury, although in certain cases it may be possible to submit other documentary evidence. The term "broker" generally includes all persons who, in the ordinary course of a trade or business, stand ready to effect sales made by others, as well as brokers and dealers registered as such under the laws of the United States or a state. These requirements generally will apply to a United States office of a broker, and the information reporting requirements generally will apply to a foreign office of a United States broker, as well as to a foreign office of a foreign broker if the broker is (i) a controlled

foreign corporation within the meaning of Section 957(a) of the Internal Revenue Code, (ii) a foreign person 50 percent or more of whose gross income from all sources for the 3-year period ending with the close of its taxable year preceding the payment (or for such part of the period that the foreign broker has been in existence) was effectively connected with the conduct of a trade or business within the United States or (iii) a foreign partnership if it is engaged in a trade or business in the United States or if 50 percent or more of its income or capital interests are held by U.S. Persons.

Generally, any amounts withheld under the backup withholding rules from a payment to a beneficial owner would be allowed as a refund or a credit against such beneficial owner's United States federal income tax.

# SUBSCRIPTION AND SELLING

Subject to the terms and conditions set forth in the Subscription Agreement dated January 9, 2001 (the "Subscription Agreement") relating to the Bonds, TVA has agreed to sell to each of the Managers named below (the "Managers"), and each of the Managers has severally agreed to purchase, the principal amount of Bonds set forth opposite its name below:

Manager	Principal Amount	
Merrill Lynch, Pierce, Fenner & Smith Incorporated	U.S.\$	500,000,000
Morgan Stanley Dean Witter & Co		500,000,000
Total	U.S.\$1	,000,000,000

The Subscription Agreement provides that the obligations of the Managers are subject to certain conditions precedent and that the Managers will be obligated to purchase all of the Bonds if any are purchased.

The Managers have advised TVA that they propose to offer all or part of the Bonds directly to the public initially at the offering prices set forth on the cover page of this Offering Circular and to dealers at such prices less a concession not in excess of 0.200% of the principal amount thereof. The Managers may allow and such dealers may reallow discounts not in excess of 0.150% of the principal amount of the Bonds to certain other dealers. After the initial offering, the public offering price and concession may be changed.

The Managers immediately upon their acceptance of the Bonds may, but are not obligated to, strip some or all of the Bonds and deliver Interest and/or Principal Components rather than Bonds to investors purchasing Strips. Sales of any such Strips would be at negotiated prices.

Each Manager represents, warrants and agrees to and with TVA that such Manager and its Affiliates (as defined herein) (i) have not offered or sold Bonds and, prior to six months after the Closing Date, will not offer or sell any Bonds to persons in the United Kingdom except to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses or otherwise in circumstances which have not resulted and will not result in an offer to the public in the United Kingdom within the meaning of the Public Offers of Securities Regulations 1995 (as amended); (ii) have complied and will comply with all applicable provisions of the United Kingdom Financial Services Act 1986 with respect to anything done by them in relation to the Bonds in, from or otherwise involving the United Kingdom; and (iii) have only issued or passed on and will only issue or pass on in the United Kingdom any document received by them in connection with an issue of Bonds to a person who is of a kind described in Article 11(3) of the United Kingdom Financial Services Act 1986 (Investment Advertisements) (Exemptions) Order 1996 (as amended) or is a person to whom such document may otherwise lawfully be issued or passed on. The term "Affiliate" means any person that directly, or indirectly through one or more intermediaries, controls, is controlled by, or is under common control with a Manager. For purposes of this definition of Affiliate, the term "control" (including the terms "controlled by" and "under common control with") means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies, including without limitation the investment or trading decisions of a person, whether through ownership of voting securities, by contract or otherwise.

Purchasers of Bonds or Strips may be required to pay stamp taxes and other charges in accordance with the laws and practices of the country of purchase in addition to the issue price set forth above.

All secondary trading in Bonds and Strips will settle in immediately available funds. See "Clearance and Settlement" — "Secondary Market Trading."

TVA has agreed to indemnify the Managers against certain civil liabilities.

# **GENERAL INFORMATION**

- 1. The issuance of the Bonds was authorized pursuant to the Resolutions. At the date of issue, all necessary legal authorizations for issuance of the Bonds will have been obtained by TVA.
- 2. The Bonds and Strips have been accepted for clearance by Euroclear and Clearstream, Luxembourg. The identifying numbers are as set forth on page C-8.
  - 3. There has been no material adverse change in the financial position of TVA since September 30, 2000.
- 4. There is no litigation, actual or threatened, which relates to TVA and to which TVA is a party or of which TVA has been notified that it will be made a party which is material in the context of the issuance of the Bonds which is not described in the Offering Circular or the current Information Statement.
- 5. In connection with the Luxembourg Stock Exchange listing application, copies of the Act, the Resolutions and book-entry regulations of TVA and a legal notice relating to the issuance of the Bonds will be deposited prior to listing with the *Greffier en Chef du Tribunal D'Arrondissement de et à Luxembourg*, where copies thereof may be obtained upon request. Copies of the Act, the Resolutions, the Fiscal Agency Agreement, annual and quarterly financial reports, and Information Statements and supplements thereto of TVA will be available for inspection and may be obtained at the office of the Special Agent, free of charge, as long as the Bonds are listed on the Luxembourg Stock Exchange.

# VALIDITY OF BONDS

The validity of the Bonds will be passed upon for TVA by Maureen H. Dunn, Esq., Executive Vice President and General Counsel of TVA, and for the Managers by Sullivan & Cromwell, 1701 Pennsylvania Avenue, N.W., Washington, DC 20006, U.S.A.

\* \* \* \* \* \*

Any statements in this Offering Circular involving matters of opinion, whether or not expressly so stated, are intended as such and not as representations of fact. This Offering Circular is not to be construed as a contract or agreement with the purchaser of any of the Bonds.

TENNESSEE VALLEY AUTHORITY

By: /s/ DAVID N. SMITH

David N. Smith Chief Financial Officer

Dated January 9, 2001

# TENNESSEE VALLEY AUTHORITY

## A Wholly Owned Corporate Agency and Instrumentality of the United States of America

The Tennessee Valley Authority ("TVA" or the "Corporation") presents this Information Statement (this "Statement") for the information of potential purchasers of (1) its Power Bonds ("New Power Bonds"), including its First Installment Series Bonds ("Installment Bonds" or "FISBS"), (2) its Discount Notes, and (3) any other evidences of indebtedness ("Other Indebtedness") it may issue pursuant to the Tennessee Valley Authority Act of 1933, as amended (the "Act"). TVA issues New Power Bonds pursuant to the Act and the Basic Tennessee Valley Authority Power Bond Resolution adopted by the Board of Directors of TVA (the "Board") on October 6, 1960, as amended on September 28, 1976, October 17, 1989 and March 25, 1992 (the "Basic Resolution"). TVA issues Discount Notes and Other Indebtedness pursuant to the Act and their authorizing resolutions. New Power Bonds, Discount Notes and Other Indebtedness are collectively referred to in this Statement as "Evidences of Indebtedness."

TVA may offer New Power Bonds and Other Indebtedness from time to time. TVA may offer Discount Notes for sale on a continuous basis by direct placement or through selected investment dealers, dealer banks, underwriters or underwriting syndicates. For each offering of New Power Bonds, except for FISBS, TVA will prepare an offering circular describing the specific terms and conditions of the New Power Bonds offered. TVA will prepare a single offering circular that describes the general terms and conditions common to all FISBS offerings. TVA will also prepare a single offering circular describing the general terms and conditions common to all Discount Note offerings. For offerings of Other Indebtedness, TVA will either prepare an offering circular describing the specific terms and conditions of the particular offering or a more general offering circular, as TVA deems appropriate. You should read this Statement, as it may be supplemented or amended, together with the appropriate offering circular, as it may be supplemented or amended, for each offering.

For each offering of an Evidence of Indebtedness, you should rely only on the information contained in (1) this Statement, (2) the relevant offering circular, and (3) any supplements or amendments to these documents approved by TVA. TVA has not authorized anyone to provide you with any information that is different from that found in this Statement and each relevant offering circular. This Statement does not constitute an offer to sell or a solicitation of an offer to buy any Evidences of Indebtedness in any jurisdiction to any person to whom it is unlawful to make an offer or solicitation.

This Statement is accurate only as of its date. TVA will supplement, amend or replace this Statement from time to time to reflect its annual financial results or otherwise as TVA deems appropriate. However, TVA assumes no further duty to update this Statement. You should rely on the most recent supplements or amendments to or replacement of this Statement over different information in this Statement.

You may obtain additional copies of this Statement by writing to Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, Tennessee 37902, Attention: Vice President and Treasurer or by calling (865) 632-3366.

Evidences of Indebtedness are not obligations of the United States of America, and the United States of America does not guarantee the payment of the principal of or interest on any Evidences of Indebtedness. TVA is not required to register Evidences of Indebtedness under the Securities Act of 1933 or to make periodic reports to the Securities and Exchange Commission under the Securities Exchange Act of 1934. TVA does not intend to register any of its Evidences of Indebtedness or file any reports with the Securities and Exchange Commission.

# FORWARD-LOOKING STATEMENTS

This Statement contains forward-looking statements relating to future events and future performance. Any statements regarding expectations, beliefs, plans, projections, estimates, objectives, intentions or assumptions or otherwise relating to future events or performance may be forward-looking. Some examples include statements regarding TVA's projections of future power and energy requirements, future costs related to environmental compliance and targets for TVA's future competitive position. Although TVA believes that the assumptions underlying the forward-looking statements in this Statement are reasonable, TVA does not guarantee the accuracy of these statements. Numerous factors could cause actual results to differ materially from those in forward-looking statements. Such factors include, among other things, new laws and regulations, especially those related to the restructuring of the electric power industry and various environmental matters; increased competition among electric utilities; legal and administrative proceedings affecting TVA; the financial environment; performance of TVA's generating facilities; fuel prices; the demand for electricity; weather conditions; changes in accounting standards; and unforeseeable events.

# TABLE OF CONTENTS

# **Information Statement**

	Page
Tennessee Valley Authority	1
Selected Financial Data	2
Comparative Five-Year Data	3
Management's Discussion and Analysis of Financial Condition and Results of Operations	4
The Area Supplied by TVA	7
Rates, Customers and Market	7
Competition	9
Power and Energy Requirements	10
Power System	10
Electricity Futures Contracts	12
Nuclear Power Program	12
Environmental Matters	16
Insurance	19
Pending Litigation	19
Management	19
Employees	20
Certain Provisions of the Tennessee Valley Authority Act	21
The Basic Resolution; Power Bonds, Discount Notes and Other Indebtedness	22
Independent Accountants	28
Financial Statements	F-1
Report of Independent Accountants	F-19
Report of Management	F-20

# TENNESSEE VALLEY AUTHORITY

TVA is one of the largest electric power systems in the United States, having produced over 148 billion kilowatt-hours ("kWh") of electricity in fiscal 1999. TVA is a wholly owned corporate agency and instrumentality of the United States of America established by the Act to develop the resources of the Tennessee Valley region.

Historically, the programs at TVA have consisted of power and nonpower programs. Financial accounts for these two types of programs have been kept separately. Substantially all of TVA's revenues and assets are attributable to its power program.

The Act requires the power program to be self-supporting from power system revenues and capital TVA raises through its power program borrowings. The Act authorizes TVA to issue Evidences of Indebtedness in an amount not exceeding \$30 billion outstanding at any one time, the proceeds of which may be used only for the power program. See "The Basic Resolution; Power Bonds, Discount Notes and Other Indebtedness."

Prior to fiscal 2000, congressional appropriations provided most of the funding for TVA's nonpower programs. TVA has obtained additional funds from revenues and user fees from the nonpower programs. In 1997, Congress enacted appropriations legislation that anticipated no further appropriations for the nonpower programs in fiscal years following 1998. This legislation required TVA, in the absence of appropriations, beginning in fiscal 1999, to fund certain nonpower programs constituting essential stewardship activities from various sources, which may include power revenues. Because Congress did not provide appropriations for TVA's nonpower programs for fiscal 2000, TVA is using power funds for its essential stewardship activities in compliance with the 1997 appropriations legislation. For a further discussion of this matter see "The Basic Resolution; Power Bonds, Discount Notes and Other Indebtedness" — "Recent Legislation."

Congress reserved the right in the Act to alter, amend or repeal the Act but provided that no amendment or repeal shall operate to impair the obligation of any contract made by TVA in the exercise of any power conferred by the Act.

For a discussion of recent legislation relating to the Act, see "The Basic Resolution; Power Bonds, Discount Notes and Other Indebtedness" — "Recent Legislation."

TVA is administered by a board of three persons appointed by the President and confirmed by the United States Senate (the "Senate"). Appointments are for nine-year staggered terms, with one term expiring each three-year interval. The Board has the sole authority to determine the rates TVA charges for power. The Act requires the rates to be sufficient to cover certain expenses. See "The Basic Resolution; Power Bonds, Discount Notes and Other Indebtedness" — "Rate Covenant."

The Act requires TVA to annually file a financial statement and complete report as to the business of the Corporation with the President and Congress. The Act authorizes the Comptroller General of the United States to periodically audit the transactions of TVA.

Under certain circumstances, the Act permits TVA to borrow up to \$150 million for a period of one year or less from the United States Treasury (the "Treasury"). The Act requires TVA to obtain the approval of the Secretary of the Treasury of the issue date and maximum interest rate for any issuance of an Evidence of Indebtedness with a term of one year or longer. The Office of Management and Budget treats TVA's borrowing authority as budget authority for purposes of the budget of the United States.

Income on Evidences of Indebtedness issued by TVA is subject to United States federal income taxation and various other federal tax consequences. There is no special exemption for Evidences of Indebtedness from federal estate and gift taxes. Under the Act, Evidences of Indebtedness are exempt both as to principal and interest from all taxation now or hereafter imposed by any state or local taxing authority except estate, inheritance and gift taxes. This exemption might not extend to franchise or other nonproperty taxes imposed on corporations or to gain or loss realized upon the sale or exchange of an Evidence of Indebtedness even though such gain might in some cases be treated as interest income for federal income tax purposes.

# SELECTED FINANCIAL DATA

The following selected financial data of TVA's power program for the fiscal years 1995 through 1999 have been derived from TVA's audited financial statements. These data should be read in conjunction with the audited financial statements and notes thereto (the "Financial Statements") presented herein.

# Condensed Statements of Income (in millions)

Fiscal Years Ended September 30,				
1999	1998	1997	1996	1995
\$6,595	\$6,729	\$5,934	\$5,951	\$5,473
4,907	4,549	4,080	3,914	3,546
1,688	2,180	1,854	2,037	1,927
<u>(9</u> )	12	157	(10)	(91)
1,679	2,192	2,011	2,027	1,836
1,777	1,959	2,003	1,966	1,826
217				
\$ 119	\$ 233	\$ 8	\$ 61	\$ 10
	1999 \$6,595 4,907 1,688 (9) 1,679 1,777 217	1999         1998           \$6,595         \$6,729           4,907         4,549           1,688         2,180           (9)         12           1,679         2,192           1,777         1,959           217         —	1999         1998         1997           \$6,595         \$6,729         \$5,934           4,907         4,549         4,080           1,688         2,180         1,854           (9)         12         157           1,679         2,192         2,011           1,777         1,959         2,003           217         —         —	1999         1998         1997         1996           \$6,595         \$6,729         \$5,934         \$5,951           4,907         4,549         4,080         3,914           1,688         2,180         1,854         2,037           (9)         12         157         (10)           1,679         2,192         2,011         2,027           1,777         1,959         2,003         1,966           217         —         —         —

# Condensed Balance Sheets (in millions)

	September 30,				
	1999	1998	1997	1996	1995
Assets					
Current Assets	\$ 1,318	\$ 1,656	\$ 1,399	\$ 1,306	\$ 1,088
Property, Plant, and Equipment	28,417	28,891	29,298	29,521	29,301
Investment Funds	731	578	561	440	260
Deferred Charges and Other Assets	2,920	2,490	2,426	2,762	2,644
TOTAL ASSETS	\$33,386	\$33,615	\$33,684	\$34,029	\$33,293
Liabilities and Proprietary Capital					
Current Liabilities	\$ 3,117	\$ 4,440	\$ 3,853	\$ 5,101	\$ 5,416
Other Liabilities	2,156	2,007	1,704	1,580	1,264
Long-Term Debt	23,903	23,020	24,152	23,320	22,583
Proprietary Capital	4,210	4,148	3,975	4,028	4,030
TOTAL LIABILITIES AND					
PROPRIETARY CAPITAL	\$33,386	\$33,615	\$33,684	\$34,029	<u>\$33,293</u>

# COMPARATIVE FIVE-YEAR DATA STATISTICAL AND FINANCIAL SUMMARIES

	Fiscal Years Ended September 30,				
	1999	1998	1997	1996	1995
Sales (millions of kWh)					
Municipalities and cooperatives	122,880	123,330	114,771	117,035	110,245
Industries directly served	22,885	18,514	17,359	16,599	16,684
Federal agencies and other(a)	10,190	21,293	27,198	19,964	12,356
Total sales	155,955	163,137	159,328	153,598	139,285
Operating revenues (millions of dollars)					
Electric					
Municipalities and cooperatives	\$5,510	\$5,554	\$4,811	\$4,980	\$4,654
Industries directly served	642	523	464	452	460
Federal agencies and other(a)	357	556	561	430	277
Other	86	96	98	89	82
Total revenues	\$6,595	\$6,729	\$5,934	\$5,951	\$5,473
Electric revenue per kWh (cents)	4.17	4.07	3.66	3.82	3.87
Winter net dependable generating capacity (megawatts)					
Hydro(b)	5,492	5,491	5,384	5,298	5,225
Fossil	15,049	15,003	15,014	15,012	15,032
Nuclear units in service	5,729	5,620	5,625	5,545	3,342
Combustion turbine	2,232	2,384	2,394	2,268	2,232
Total capacity	28,502	28,498	28,417	28,123	25,831
System peak load (megawatts) — summer	28,295	27,253	26,661	25,376	25,496
System peak load (megawatts) — winter	26,388	23,204	26,670	25,995	24,676
Percent gross generation by fuel source					
Fossil	63%	62%	61%	65%	71%
Hydro	7%	10%	11%	11%	12%
Nuclear	30%	28%	28%	24%	17%
Fuel cost per kWh (cents)					
Fossil	1.28	1.25	1.23	1.23	1.26
Nuclear(c)	.51	.71	.58	.56	.61
Aggregate fuel cost per kWh net thermal					
generation	1.05	1.10	1.04	1.06	1.14
Fuel data					
Net thermal generation (millions of kWh)	137,169	139,727	135,735	131,898	118,097
Billion Btu	1,403,110	1,426,151	1,381,837	1,338,157	1,197,295
Fuel expense (millions of dollars)	1,434	1,538	1,406	1,395	1,348
Cost per million Btu (cents)	102.21	107.81	101.73	104.22	112.61
Net heat rate, fossil only	10,229	10,207	10,180	10,145	10,138

<sup>(</sup>a) Sales and revenues have been adjusted to include sales to other utilities.

<sup>(</sup>b) Includes 405 megawatts of dependable capacity from the U.S. Army Corps of Engineers projects on the Cumberland River System.

<sup>(</sup>c) TVA changed its method of expensing the interest component of nuclear fuel expense in 1995.

# MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

## **Results of Operations**

Net income for fiscal 1999 amounted to \$119 million, a decrease of \$114 million from net income of \$233 million in fiscal 1998. Net income for fiscal 1998 was \$233 million compared with \$8 million for fiscal 1997. Reasons for changes from fiscal 1997 to fiscal 1998 and from fiscal 1998 to fiscal 1999 are discussed below.

## FISCAL 1999 COMPARED TO FISCAL 1998

## Operating Revenues

Operating revenues were \$6,595 million in fiscal 1999 compared with \$6,729 million in fiscal 1998. The \$134 million decrease was primarily due to a reduction in wholesale sales to other utilities related to mild weather and a weaker spot market for power during fiscal 1999.

# Operating Expenses

Operating expenses increased \$358 million, from \$4,549 million in fiscal 1998 to \$4,907 million in fiscal 1999. This increase was primarily due to a \$261 million charge for the acceleration of the amortization of regulatory assets (see note 1 of the accompanying Financial Statements — Accelerated amortization), coupled with a \$111 million increase in the amortization of regulatory assets attributable to the reclassification of certain nuclear fuel costs (see note 1 of the accompanying Financial Statements — Other deferred charges).

## Interest Expense

Net interest expense declined \$182 million, from \$1,959 million in fiscal 1998 to \$1,777 million in fiscal 1999. This reduction largely reflects savings associated with the refinancing of \$3.2 billion of debt issues formerly held by the Federal Financing Bank. Total outstanding indebtedness, as of September 30, 1999, was \$26.4 billion, with an average interest rate of 6.83 percent; as of September 30, 1998, this amount outstanding was \$26.7 billion, with an average interest rate of 7.45 percent.

## FISCAL 1998 COMPARED TO FISCAL 1997

# Operating Revenues

Operating revenues were \$6,729 million in fiscal 1998 compared with \$5,934 million in fiscal 1997. The \$795 million increase was primarily due to additional revenues from the fiscal 1998 rate increase, coupled with an increase in energy sales to municipalities and cooperatives as a result of the hot summer during fiscal 1998. The TVA service area experienced 2.2 percent greater heating degree days and 46.2 percent greater cooling degree days in fiscal 1998 versus fiscal 1997.

# Operating Expenses

Operating expenses increased \$469 million, from \$4,080 million in fiscal 1997 to \$4,549 million in fiscal 1998. This increase was primarily due to higher fuel and purchased power expense in fiscal 1998 as a result of higher system generation and greater purchases of power at higher prices, coupled with an increase in operating and maintenance expense.

# Other Income and Expenses

TVA had net other income of \$12 million in fiscal 1998 compared with net other income of \$157 million in fiscal 1997. The fiscal 1997 net other income consisted primarily of investment earnings of the decommissioning trust funds of \$138 million. Subsequent to fiscal 1997, TVA modified its accounting methodology such that investment earnings of the decommissioning trust funds are deferred (see note 9 of the accompanying Financial Statements — Decommissioning costs).

# Interest Expense

Net interest expense declined \$44 million, from \$2,003 million in fiscal 1997 to \$1,959 million in fiscal 1998. Total outstanding indebtedness, as of September 30, 1998, was \$26.7 billion, with an average interest rate of 7.45 percent; as of September 30, 1997, this amount outstanding was \$27.4 billion, with an average interest rate of 7.56 percent.

# **Liquidity and Capital Resources**

# Capital Structure

During the first 25 years of TVA's existence, the United States Government made appropriation investments in TVA power facilities. In 1959, TVA received congressional approval to issue bonds to finance its growing power program. For the last four decades, TVA's power program has been required to be self-supporting. As a result, TVA funds its capital requirements through internal cash generation and through borrowings (subject to a congressionally mandated \$30 billion debt limit).

A return on the United States Government's initial appropriation investment in TVA power facilities, plus a repayment of the initial investment, is specified by law. The combined payment for fiscal 1999 was \$57 million. Total cumulative repayments and return on investment by TVA to the Treasury exceed \$3 billion.

#### Cash Flows

Net cash provided by power program operations for fiscal 1999, 1998 and 1997 was \$1,431 million, \$1,394 million and \$1,066 million, respectively. This positive trend reflects improvements made in TVA's operating activities during the three-year period coupled with the rate increase in fiscal 1998.

Net cash used in investing activities for fiscal 1999, 1998 and 1997 was \$956 million, \$742 million and \$580 million, respectively. The \$214 million increase from fiscal 1998 to fiscal 1999 was primarily due to an increase in construction expenditures of \$192 million reflecting the construction of natural gas combustion turbines for peaking power. The \$162 million increase from fiscal 1997 to fiscal 1998 primarily reflects the fiscal 1997 sale of certain receivables.

Net cash used in financing activities for fiscal 1999, 1998 and 1997 was \$763 million, \$560 million and \$425 million, respectively. For fiscal 1999, the cash used in financing activities reflects the aggregate net repayment of total outstanding debt of \$308 million coupled with borrowing expenses and other financing costs of \$391 million.

# Capital Resources

During fiscal 1999, 1998 and 1997 TVA accessed the capital markets through cost-effective long-term financing structures and continued to expand its investor base by tapping the global and retail debt markets. The proceeds from the borrowings were used to refinance existing debt.

#### Market Risk

Risk Policies

TVA is exposed to market risks including changes in interest rates, foreign currency exchange rates and volatility of certain commodity and equity market prices. To manage the volatility attributable to these exposures, TVA has entered into various non-trading derivative transactions, principally interest rate swap agreements, foreign currency swap contracts, forwards, futures and option contracts. TVA has established its Risk Management Committee, which maintains responsibility for reviewing and approving controls and procedures for TVA-wide risk management activities including the oversight of models and assumptions used to measure risk, the review of counterparty exposure limits and the establishment of formal procedures for use of financial hedging instruments.

TVA is exposed to losses in the event of counterparties' nonperformance and accordingly has established controls to determine the creditworthiness of counterparties in order to mitigate exposure to counterparty credit risk. With respect to hedging activities, TVA risk management policies allow the use of derivative financial instruments to manage financial exposures but prohibit the use of these instruments for speculative or trading purposes. TVA currently accounts for such hedging activities using the deferral method, and gains and losses are recognized in the accompanying financial statements when the related hedged transaction occurs.

# Interest Rate and Foreign Currency Risk

TVA manages its daily cash needs through issuance of discount notes and other short-term borrowings. These borrowings with maturities of less than one year expose TVA to fluctuations in short-term interest rates. TVA is not exposed to changes in interest rates on most of its long-term debt until such debt matures and may be refi-

nanced at the then applicable rates. An interest rate swap is used to hedge TVA's exposure related to its inflation-indexed accreting principal bonds, and currency swap contracts are used as hedges for foreign currency denominated debt issues (see note 5 of the accompanying Financial Statements — Foreign currency transactions and interest rate swap). Based on TVA's overall interest rate exposure at September 30, 1999, including derivative and other interest rate sensitive instruments, a near-term 1 percentage point change in interest rates would not have a material impact on TVA's financial position or results of operations for fiscal 1999.

# Commodity Price Risk

TVA is exposed to the impact of market fluctuations in the price and transportation costs of certain commodities and fuels including, but not limited to, coal, natural gas and electricity. TVA employs established policies and procedures to manage risks associated with these market fluctuations by using various commodity-based derivative instruments, including futures, forwards and option contracts. To monitor the risk of commodity trading activities, TVA employs a daily Value at Risk ("VaR") methodology which utilizes a statistical-based approach to determine adjusted historical changes in the value of a market risk sensitive commodity-based financial instrument to estimate the amount of change in the current value of the instrument that could occur at a specified confidence level over a specified interval. Based on TVA's VaR analysis of its overall commodity price risk exposure at September 30, 1999, management does not anticipate a materially adverse effect on TVA's financial position or results of operations as a result of market fluctuations.

# Equity Price Risk

TVA maintains trust funds, consistent with the United States Nuclear Regulatory Commission (the "NRC") requirements, to fund certain costs of decommissioning its nuclear generating units. These funds are managed by various money managers and are primarily invested in marketable equity securities, which are exposed to price fluctuations in equity markets. TVA actively monitors the trust funds' portfolios by benchmarking the performance of their investments against certain price indices. The accounting for nuclear

decommissioning recognizes that sufficient funds have been set aside to fully fund expected decommissioning obligations, and, therefore, fluctuations in trust fund marketable security returns do not affect the earnings of TVA (see note 1 of the accompanying Financial Statements — Decommissioning costs).

## **Accounting Standards**

Accounting for the Effects of Regulation

TVA accounts for the financial effects of regulation in accordance with Statement of Financial Accounting Standards ("SFAS") No. 71, Accounting for the Effects of Certain Types of Regulation. As a result, TVA records certain regulatory assets and liabilities that would not be recorded on the balance sheet under generally accepted accounting principles for non-regulated entities.

TVA has approximately \$1.6 billion of regulatory assets (see note 1 of the accompanying Financial Statements — Other deferred charges and Debt issue and reacquisition costs) along with approximately \$6.3 billion of deferred nuclear plants as of September 30, 1999. In the event that restructuring of the utility industry changes the application of SFAS No. 71, TVA would be required to evaluate such regulatory assets and deferred nuclear plants under the provisions of SFAS No. 121, Accounting for the Impairment of Long-Lived Assets and Long-Lived Assets to Be Disposed Of. Statement 121 establishes criteria for evaluating and measuring asset impairments and states that regulatory assets that are no longer probable of recovery through future revenues be charged to earnings. Such an event may have a material adverse effect on future results of operations from the write-off of regulatory assets. However, TVA intends to fully recover any regulatory and other deferred assets that may result from TVA's transition to a competitive market.

# New Accounting Pronouncements

In June 1998, the Financial Accounting Standards Board (the "FASB") issued SFAS No. 133, Accounting for Derivative Instruments and Hedging Activities, which requires that every derivative instrument (including certain derivative instruments embedded in other contracts) be recorded on the balance sheet as either an asset or

liability measured at its fair value. The statement requires that changes in the derivative's fair value be recognized currently in earnings unless specific hedge accounting criteria are met. TVA may engage in hedging activities using futures, forward contracts, options and swaps to hedge the impact of market fluctuations on energy commodity prices, interest rates and foreign currencies. In July 1999, the FASB deferred the effective date of SFAS No. 133 to fiscal years beginning after June 15, 2000. TVA is currently assessing the effect, if any, on its financial statements of implementing SFAS No. 133.

In March 1998, the Accounting Standards Executive Committee of the American Institute of Certified Public Accountants issued Statements of Position ("SOP") 98-1, Accounting for the Costs of Computer Software Developed or Obtained for Internal Use, which provides guidance on accounting for the costs of computer software developed or obtained for internal use. Under SOP 98-1, certain costs which are currently expensed may now be capitalized and amortized over some future period. SOP 98-1, which is effective for TVA in fiscal 2000, is not expected to have a material impact on TVA's financial position or results of operations.

In December 1998, the Emerging Issues Task Force ("EITF" or the "Task Force") of the FASB issued EITF 98-10, Accounting for Contracts Involved in Energy Trading and Risk Management Activities. Some energy-related companies have been entering into contracts for the purchase and sale of energy commodities and netting those activities in the income statement (settlement basis). In EITF 98-10, the Task Force stated that energy trading contracts are to be recorded at fair value on the balance sheet, with related gains and losses included in earnings. EITF 98-10, which is effective for TVA in fiscal 2000, is not expected to have a material impact on TVA's financial position or results of operations.

# Nuclear Decommissioning Costs

The FASB has undertaken a project regarding the accounting for closure and removal of long-lived assets, including the decommissioning of nuclear generating units. The FASB has reached several tentative conclusions with respect to the project and expects to issue an exposure draft in the first quarter of calendar year 2000;

however, it is uncertain when the final statement will be issued and what impact it may ultimately have on TVA's financial position or results of operations.

Effective for fiscal 1998, TVA changed its method of accounting for decommissioning costs and related liabilities in order to comply with certain of the FASB's tentative conclusions, as well as certain rate-setting actions. TVA's current accounting policy recognizes all obligations related to closure and removal of its nuclear units as incurred. The liability for closure is measured as the present value of the estimated cash flows required to satisfy the related obligation and discounted at a determined risk-free rate of interest. The corresponding charge to recognize the additional obligation was effected through the creation of a regulatory asset. TVA further modified its method of accounting for decommissioning costs such that earnings from decommissioning fund investments, amortization expense of the decommissioning regulatory asset and interest expense on the decommissioning liability are deferred in accordance with SFAS No. 71.

# THE AREA SUPPLIED BY TVA

TVA supplies power in most of Tennessee, northern Alabama, northeastern Mississippi and southwestern Kentucky, and in small portions of Georgia, North Carolina and Virginia. TVA serves a population of about 8 million people. Subject to certain minor exceptions, TVA may not without specific authorization by act of Congress enter into contracts which would have the effect of making it or the distributors of its power a source of power supply outside the area for which TVA or the distributors were the primary source of power supply on July 1, 1957.

TVA is primarily a wholesaler of power. Its customers are composed of three major groups: (1) distributors, consisting of municipal and cooperative systems; (2) industries that have large or unusual loads; and (3) federal agencies. Additionally, TVA has entered into exchange power arrangements with most of its surrounding electric systems.

## RATES, CUSTOMERS AND MARKET

The Act gives the Board sole responsibility for establishing the rates that TVA charges for power and authorizes the Board to include in

power contracts terms and conditions that it judges necessary or desirable for carrying out the purposes of the Act. The Act requires TVA to charge rates for power which, among other things, will produce gross revenues sufficient to provide funds for (1) operation, maintenance and administration of its power system; (2) payments to states and counties in lieu of taxes; (3) debt service on outstanding Evidences of Indebtedness; and (4) annual payments to the Treasury in repayment of and as a return on the Government's appropriation investment in TVA power facilities (the "Appropriation Investment"). See "Certain Provisions of the Tennessee Valley Authority Act" and "The Basic Resolution; Power Bonds, Discount Notes and Other Indebtedness" - "Rate Covenant" and "Recent Legislation." Rates set by the Board are not subject to review or approval by any state or federal regulatory body. See "Competition."

A summary of power program operating revenues by customer type for each of the last five fiscal years ended September 30 is shown in the Comparative Five-Year Data presented on page 3.

# **Municipal and Cooperative Distributors**

Sales to municipal and cooperative distributors accounted for approximately 84 percent of TVA's power revenues in fiscal 1999. TVA has long-term wholesale power contracts with 159 municipal and cooperative distributors. All of these contracts require distributors to purchase substantially all of their electric power and energy requirements from TVA.

All distributors purchase power under one of three basic arrangements. Fifty-eight distributors purchase power under contracts that require 10 years' notice to terminate and further provide that on each anniversary beginning on the tenth anniversary, one additional year is automatically added to the term. Four distributors have contracts that require 15 years' notice to terminate the contract. On each anniversary of these contracts, beginning on the fifth anniversary, one additional year is automatically added to the term. TVA has also offered distributors the option of moving from 10- or 15-year termination notice periods to a 5-year termination notice period. These contract amendments are conditioned upon notice not being given during the first 5 years after the effective date of the revision. Ninety-seven

distributors have entered into contractual arrangements of this type. TVA has agreed that all of these term arrangements are deemed to provide for adequate recovery by TVA of any investment in generation, transformation or transmission facilities for service to the distributor.

A number of TVA distributors, including some with the largest loads, have expressed interest in further revising their wholesale power contracts to allow them more options respecting contract term and other matters, such as purchasing only a portion of their power requirements from TVA. TVA has indicated its willingness to work with distributors to accommodate their desire for more flexibility. For a discussion of events that may affect TVA's relationships with the distributors of its power, see "Competition."

TVA's wholesale power contracts contain standard provisions specifying the wholesale rates, resale rates and terms and conditions under which power is to be distributed. Under these contracts, TVA, on a quarterly basis, may determine and make adjustments in the wholesale rate schedule with corresponding adjustments in resale rate schedules necessary to enable TVA to meet all requirements of the Act and the tests and provisions of its bond resolutions. The contracts provide for agreement between the parties on general or major changes in both the wholesale and resale rate schedules. If, however, agreement is not reached, the contracts permit TVA to make changes in these schedules to carry out the objectives of the Act, to meet financial requirements and tests and to comply with the provisions of its bond resolutions.

The power contracts between TVA and the distributors of TVA power specify the resale rates that distributors charge the ultimate power consumers. These rates are revised from time to time to reflect changes in costs, including changes in the wholesale cost of power. They are designed to promote the Act's objective of providing an adequate supply of power at the lowest feasible rates.

# Other Sources of Power Revenues

Revenues from industries and federal agencies directly served and from exchange power arrangements with other power systems and other revenue accounted for approximately 16 percent of TVA's power revenues in fiscal 1999. Contracts

with industries directly served by TVA are normally for 10-year terms. These contracts are subject to termination by TVA or the customer upon a minimum notice period that varies according to the customer's contract demand and the period of time service has been provided to the location where it is to be terminated. TVA establishes the rates it charges industries it directly serves. These rates are the same as those charged by the distributors of TVA power to large industries (those with demand greater than 25,000 kilowatts). TVA sells power to federal agencies under the same contract terms and rates as directly-served industries. TVA has exchange power arrangements with 12 neighboring power systems. See note 1 of the accompanying Financial Statements.

## **COMPETITION**

The electric utility industry has become increasingly competitive over the last decade. Competition is expected to continue to intensify, and restructuring legislation may dramatically change the way electric utilities do business in the future. Among the early initiatives that have begun to promote industry competition is the Energy Policy Act of 1992 (the "Energy Act"). The Energy Act, and related Federal Energy Regulatory Commission ("FERC") orders, already allow competitors of a utility to access that utility's transmission system to sell electricity to other electric power suppliers and wholesale customers. In TVA's case, some special provisions apply.

Under the TVA Act, subject to certain minor exceptions, TVA may not currently enter into contracts that would have the effect of making it or the distributors of its power a source of power supply outside a statutorily-specified area. However, under a special provision of the Energy Act (the "anti-cherry-picking provision"), TVA is not required to provide its competitors access to its transmission system to transmit power for consumption within the area that TVA or the distributors of its power may serve. Thus, while TVA may not sell power outside its current service area, its competitors are not allowed to use its transmission system to sell power within TVA's service area.

In the future, it is likely that the current law that serves to limit competition between TVA and

its competitors will change. In the past three years, numerous bills have been introduced in Congress designed to restructure the electric utility industry and mandate or promote competition in the industry. Within the context of restructuring legislation, some of the key issues for TVA are: (1) whether TVA rates will be regulated by FERC, (2) whether TVA and the distributors of TVA power will be able to sell power outside the TVA service area, (3) whether Congress will attempt to shorten the terms of TVA's present wholesale power contracts with the distributors of its power, and (4) whether TVA will have the right to recover its power system investments that would no longer be economical under full and open market competition (stranded costs).

In April 1999, the Clinton Administration unveiled its Comprehensive Electricity Competition Act (the "CECA"). Whereas an earlier version of the CECA did not address TVA, this latest version outlined provisions for TVA in a restructured industry. The CECA provided, among other things, that: (1) TVA's Board would continue to have final authority in setting wholesale power rates, (2) TVA and its power distributors would renegotiate terms of the existing power contracts, (3) TVA would submit a stranded cost recovery plan to FERC for approval, and (4) the anti-cherry picking provision and the statutory fence that limits TVA's sales to its current service area would be simultaneously repealed.

Long before the Administration introduced its bill, TVA had been working closely with the Tennessee Valley Public Power Association ("TVPPA"), the association which represents all distributors of TVA power, to develop a consensus position on industry restructuring. After a series of negotiations, TVA concurred in September 1999 with the vast majority of its distributors on the key elements of legislation regarding TVA. This legislation would allow for: (1) simultaneous repeal of the anti-cherry picking provision and the fence on a yet-to-be-determined "effective date," (2) renegotiation of power contract terms with a minimum termination notice period of three years following a one-year negotiation period, (3) new limitations on TVA retail sales in TVA's current service area, (4) stranded cost recovery, (5) FERC regulation of TVA's transmission system, (6) TVA subjection to antitrust laws (with the exception of civil damages and attorney's fees), (7) termination of most of TVA's

existing regulatory role with respect to distributors, and (8) limitation on TVA new generation to locations within the current TVA service territory. No provisions were included with respect to TVA wholesale rate regulation. TVPPA submitted the September 1999 position to Tennessee Valley legislators for consideration in their efforts to draft restructuring legislation.

Throughout the majority of 1999 the United States House of Representatives (the "House") and Senate have held hearings on the topic of industry restructuring. The House Subcommittee on Energy and Power has been the most active in the effort to develop federal legislation and reported a bill in October 1999. The following provisions are part of that legislation: (1) TVA's Board would continue to regulate wholesale power rates inside the current service area while FERC would regulate wholesale rates for sales outside the current service area, (2) TVA must renegotiate power contracts with its power distributors according to the TVPPA position, (3) TVA's retail sales in the current service area are limited similarly to the TVPPA position, (4) TVA is allowed to recover stranded costs, (5) TVA's transmission system would be regulated by FERC, (6) TVA would be subject to antitrust laws similar to the CECA provisions, (7) the fence for sales of "excess energy" and the anti-cherry picking provision are repealed upon enactment, and (8) additional TVA generation would only be planned and built for customers within the current TVA service area.

Although a great deal of attention has been given to this issue, federal legislation will continue to be debated well into the year 2000 and possibly beyond. Whatever the outcome of the legislative process, TVA's management has developed and will continue to develop plans and strategies designed to position TVA for competitive success in a restructured industry. Through its 10-Year Business Plan, TVA has set forth a comprehensive financial plan to achieve a competitive total cost of power. Having already achieved significant debt reduction as well as other operational improvements, TVA is well on its way to meeting the plan objective.

# POWER AND ENERGY REQUIREMENTS

TVA prepares annual forecasts of future power and energy requirements as part of its

planning and budgeting process. TVA's forecast procedure involves producing a range of load forecasts for the explicit purpose of bounding the range of uncertainty associated with load growth. TVA produces the load forecasts probabilistically. TVA believes that there is a 90 percent probability that the actual load will be less than the high load forecast, a 50 percent probability that the actual load will be less than medium load forecast and a 10 percent probability that actual load will be less than the low load forecast. TVA's current load forecast through fiscal year 2002 reflects an average annual load growth rate of 2.9 percent, 1.8 percent and .8 percent for the high, medium and low load forecasts, respectively. TVA's total system energy requirements through fiscal 2002 reflect an average annual growth rate of 2.9 percent, 1.9 percent and .6 percent for the high, medium and low load forecasts, respectively. Numerous factors, such as weather conditions and the health of the regional economy, could cause actual results to differ materially from TVA's forecasts.

## **POWER SYSTEM**

TVA's power generating facilities at September 30, 1999, included 29 hydroelectric plants, 11 coal-fired plants, 3 nuclear plants, 1 pumped storage hydroelectric plant and 4 combustion turbine plants. Power is delivered to TVA customers over a transmission system of approximately 17,000 miles of lines, including 2,400 miles of extra-high-voltage (500,000 volt) transmission lines. The system interconnects with neighboring power systems at numerous points. TVA has various types of interchange arrangements with these systems. The extent and types of interchange transactions depend upon the characteristics of the systems' loads, the management policies of the systems and other factors. Interchange arrangements are an essential part of TVA's efforts to minimize investment in electrical facilities, increase the reliability of service, effect operating economies and minimize the cost of electric energy.

During the fiscal year ended September 30, 1999, 62 percent of the power generated by the TVA coordinated system was by fossil-fired plants, 30 percent by nuclear, 7 percent by hydro and 1 percent by combustion turbines. Coal consumption during this time was 39.7 million tons. Coal is purchased under contracts ranging from a single

delivery to deliveries over several years. TVA coal inventory levels vary from plant to plant based upon a simulated inventory model. As of September 30, 1999, TVA had approximately 30 days' coal supply in inventory at full burn. See "Nuclear Power Program" — "Nuclear Fuel" for a discussion of TVA's nuclear fuel supplies. Management believes the sources and availability of fuel materials essential to its business should be adequate for the foreseeable future.

TVA's power system is one of the largest in the United States in capacity and in energy

production. Its size permitted the construction of large facilities which resulted in lower unit costs. Most of TVA's dams were completed years ago when construction costs were far below present-day levels. Because most of the dams are multipurpose, their cost is shared by navigation, flood control, recreation and local economic development, as well as by power. Thus, each purpose is served at a substantially lower cost than if the dams had been built for a single purpose.

#### **Generating Resources**

The following table summarizes the winter net dependable capacity ("NDC") in megawatts ("MW") on this coordinated system as of September 30, 1999:

	Generating Units	Winter NDC MW(1)
TVA Hydro Plants	109	3,237
TAPOCO Hydro Plants		318(2)
U.S. Army Corps of Engineers Hydro Plants		405(3)
TVA Pumped Storage Facility	4	1,532
Total Hydro		5,492
Fossil	59	15,049
Nuclear	5	5,729
Combustion Turbine	48	2,232
Total NDC		28,502

- (1) NDC as stated is the net power output which can be obtained for a period adequate to satisfy the daily load patterns under expected conditions of operation with equipment in an average state of maintenance. For planning purposes, TVA currently estimates summer dependable total hydro capacity of approximately 5,770 MW; coal-fired capacity of approximately 14,668 MW; nuclear power capacity of approximately 5,590 MW and combustion turbine capacity of approximately 2,048 MW, for a total summer NDC of approximately 28,076 MW.
- (2) Four hydro plants owned by TAPOCO, Inc., a subsidiary of the Aluminum Company of America ("Alcoa"), are operated as part of the TVA power system. Under contractual arrangements with TAPOCO, electric power generated at these facilities is supplied to TVA. In return, TVA supplies electric power for Alcoa's aluminum plant operations located in Tennessee.
- (3) The U.S. Army Corps of Engineers' plants on the Cumberland River system have a total installed capacity of 975 MW, of which 405 MW of NDC is available to TVA under a marketing agreement with the Southeastern Power Administration.

Under arrangements among TVA, the U.S. Army Corps of Engineers (the "CORPS") and the Southeastern Power Administration ("SEPA"), 8 hydro plants of the CORPS on the Cumberland River system are operated in coordination with the TVA system. These arrangements further provide for capacity (405 MW) and energy from the Cumberland River system to be

supplied to TVA by SEPA at the points of generation and the price paid for the power to be based on the operating and maintenance expenses and amortization of the power facilities. A portion of the output of the Cumberland River system is also made available to SEPA's customers outside the TVA region. The agreement with SEPA covering these arrangements for power from the

Cumberland River system can be terminated upon three years' notice. This notice may be given beginning June 30, 2017.

TVA has contracted with Choctaw Generation, Inc. to purchase and take delivery of up to 440 MW of power over a 30-year term from a lignite power plant to be constructed in Mississippi, contingent upon satisfactory completion of all necessary environmental reviews. Commercial operation of the plant is currently scheduled for January 2001. The owner of the facility bears the construction and operating risks. If the owner fails to deliver the required energy, the owner will be responsible for securing replacement power for TVA at the contractually agreed price.

TVA plans to install additional peaking capacity at two of its fossil plants. By the summer of 2000, TVA intends to install eight 85 MW natural-gas combustion turbines. Four units will be installed at the Gallatin plant and four at the Johnsonville plant, both of which have existing combustion turbines. TVA is also planning to install eight additional 85 MW natural-gas combustion turbines in 2001.

#### **Integrated Resource Plan**

In December 1995, the Board approved TVA's Integrated Resource Plan ("IRP") that presents TVA's strategy for meeting future customer energy demands. The IRP identifies a 25year, least-cost energy resource strategy for TVA's power system. TVA's IRP strategy relies on a portfolio of energy resource options that made up the best strategies evaluated for the TVA power system. These strategies performed well across all of the IRP evaluation criteria, including debt, rates, costs, reliability and environmental impacts and regulations. These strategies are designed to enable TVA to respond to future demands in a manner that maintains flexibility and enhances its competitive position. Included in the portfolio are customer service options such as energy conservation and load management; supply side options, including power purchased from other producers; and investigation and use of renewable energy. TVA continues to review and update its resource plans.

#### **ELECTRICITY FUTURES CONTRACTS**

TVA may enter into electricity futures contracts for the sole purpose of limiting or otherwise

hedging TVA's economic risks directly associated with electric power generation, purchases and sales. The Chicago Board of Trade has designated the TVA power transmission system as a hub for electricity futures contracts.

#### **NUCLEAR POWER PROGRAM**

#### Overview

TVA has five operating nuclear units at three locations: Sequoyah Units One and Two, Browns Ferry Units Two and Three and Watts Bar Unit One. Construction activities at three additional units have been suspended. One licensed unit remains in an inoperative status. See detailed discussions on all operating and inoperative nuclear units in the sections below and note 2 of the accompanying Financial Statements.

#### Sequoyah

Sequoyah is a two-unit plant located approximately 7.5 miles northeast of the city limits of Chattanooga, Tennessee, with pressurized water reactors supplied by Westinghouse Electric Corporation. Unit One is rated at 1,147 MW net electrical output. Unit Two is rated at 1,142 MW net electrical output. TVA received an Operating License for Unit One in 1980, and the unit began commercial operation in 1981. TVA received an Operating License for Unit Two in 1981, and the unit began commercial operation in 1982. The Operating Licenses for these units expire 40 years after issuance. TVA designed, built and operates the plant. TVA voluntarily shut down both units in 1985 in response to technical and operational concerns.

Both Sequoyah units returned to commercial operation in 1988. Sequoyah Units One and Two have recorded a 90.0 average percent equivalent availability for a three-year period ending September 30, 1999. The "equivalent availability" is the ratio of the energy a unit could have generated, if called on, to the energy the unit would have produced if it had run at full load over the entire period measured, expressed as a percentage.

#### **Browns Ferry**

Browns Ferry is a three-unit plant located approximately 10 miles southwest of Athens, Alabama, with boiling water reactors supplied by General Electric Company. Each unit was origi-

nally rated at 1,065 MW net electrical output. However, Unit Three was uprated five percent during the cycle 8 refueling outage and Unit Two was uprated during the cycle 10 outage in May 1999. For both units, net electrical output is 1,118 MW. TVA designed, built and operates the plant. TVA received Operating Licenses for Units One, Two and Three in 1973, 1974 and 1976, respectively. These units began commercial operation in 1974, 1975 and 1977, respectively. The Operating Licenses for these units expire 40 years after issuance. TVA voluntarily shut down Units One, Two and Three in 1985 in response to technical and operational concerns.

Browns Ferry Unit Two returned to commercial operation in 1991. Browns Ferry Unit Two has recorded a 91.5 average percent equivalent availability factor for a three-year period ending September 30, 1999.

TVA restarted Browns Ferry Unit Three in November 1995, and the unit returned to commercial operation in January 1996. Browns Ferry Unit Three recorded a 91.1 percent equivalent availability factor from restart through September 30, 1999.

Browns Ferry Unit One has been idled since March 1985. Major modifications would be required to bring the plant to current standards. At September 30, 1999, the undepreciated cost of Browns Ferry Unit One was \$66 million. In 1994, preliminary cost estimates based on IRP information indicated that cost associated with returning Unit One to service would have been between \$1.2 and \$3.2 billion. See "Status of Certain Nuclear Units" for a further discussion of the status of Browns Ferry Unit One.

#### Watts Bar

Watts Bar is a two-unit plant located approximately 50 miles northeast of Chattanooga, Tennessee, with pressurized water reactors supplied by Westinghouse Electric Corporation. Unit One is rated at 1,158 MW net electrical output. TVA designed and built the plant to its present level of completion. In October 1999, TVA submitted its request for extension of the Construction Permit for Unit Two. Pending NRC action, the permit is extended beyond its December 1999 expiration date.

Although physical construction of Watts Bar Unit One was substantially complete in 1985, efforts to obtain an Operating License were delayed due to numerous safety concerns. Overall plant design was reverified, and extensive modifications were made. The NRC granted TVA a license to operate Unit One at up to five percent of rated power in November 1995 and at full power in February 1996. Watts Bar Unit One commenced full power commercial operation in May 1996. The Operating License for Unit One expires 40 years after issuance. Watts Bar Unit 1 has recorded an 84.3 percent equivalent availability factor for a three-year period ending September 30, 1999.

In 1988, TVA suspended construction activities at Watts Bar Unit Two because of a reduction in the forecasted load growth. Total investment in Unit Two at September 30, 1999, was \$1.7 billion, including capitalized interest. In 1994, preliminary cost estimates based on IRP information indicated that the cost associated with completing Unit Two would have been between \$1.1 and \$2.9 billion. See "Status of Certain Nuclear Units" for a further discussion of the status of Unit Two.

#### **Bellefonte**

Bellefonte is a two-unit power plant located approximately 59 miles southwest of Chattanooga, Tennessee. Each unit has a pressurized water reactor supplied by Babcock & Wilcox Company rated at 1,212 MW net electrical output. TVA designed and built the plant to its present level of completion. Construction Permits were obtained from the NRC for both units in December 1974.

TVA deferred construction activities on Bellefonte Unit Two because of a reduction in forecasted load growth in October 1985. TVA deferred construction activity on Unit One in July 1988. In March 1993, TVA notified the NRC of its plans to resume completion activities at Bellefonte, but no construction activities have occurred since 1988. Construction Permits for Unit One and Unit Two have been extended by the NRC to 2001 and 2004, respectively.

As of September 30, 1999, TVA had \$4.6 billion, including capitalized interest, invested in these units. See "Status of Certain Nuclear Units" for discussion of Bellefonte's current status. In 1994, preliminary cost estimates based on IRP information indicated that cost associated with

completing the Bellefonte units would have been between \$1.3 and \$3.5 billion for Unit One and \$900 million and \$2.4 billion for Unit Two.

#### Status of Certain Nuclear Units

Preliminary cost estimates, utilizing the IRP (see "Power System" — "Integrated Resource Plan"), showed that completing the units at Bellefonte and Watts Bar Unit Two may not be economically feasible. Consequently, in December 1994 the Board announced a major change in policy declaring that TVA will not, by itself, complete Bellefonte Units One and Two and Watts Bar Unit Two as nuclear units. Additionally, the Board decided that Browns Ferry Unit One would continue in its inoperative status.

TVA's IRP identified as a viable option the conversion of the Bellefonte facility to a combined-cycle plant utilizing natural gas or gasified coal. In 1997, an independent team of technical and financial experts completed a feasibility study to evaluate options for the conversion of Bellefonte Nuclear Plant to a fossil fuel-fired plant. The feasibility study indicates that one of the most economical fossil conversion strategies is to complete Bellefonte as a natural gas-fired combinedcycle plant. TVA also issued an Environmental Impact Statement ("EIS") assessing the environmental impacts of various fossil conversion options. The EIS identified the natural gas-fired combined-cycle plant alternative as the preferred option.

Although TVA submitted a proposal to the United States Department of Energy ("DOE") to complete Bellefonte as a nuclear plant, provide DOE irradiation services for the production of tritium and operate the plant to produce electricity, DOE decided to pursue an alternate option for irradiation services at TVA. Accordingly, this option for Bellefonte is no longer being considered by TVA, and Bellefonte is in deferred status.

Tritium is an isotope of hydrogen that is used in all of the United States' nuclear weapons. Tritium decays at the rate of five percent per year and must be replaced periodically. The United States has not produced tritium since 1988. An agreement in principle has been reached between TVA and DOE for TVA to use Watts Bar Unit One and its Sequoyah Nuclear Units, if necessary, to provide irradiation services for the production of tritium. TVA's efforts during the first three to four

years of the proposed agreement would focus on obtaining operating license amendments to allow the provision of irradiation services and on performing any necessary modifications to the plants to enable TVA to provide irradiation services.

At September 30, 1999, TVA's total investment in Bellefonte Units One and Two, Watts Bar Unit Two and Browns Ferry Unit One was \$6.4 billion. TVA's future decisions regarding these units will ultimately impact the method of cost recovery. The Board has determined that it will establish rate adjustments and operating policies to ensure full recovery of the cost of these units and compliance with the requirements of the TVA Act.

Because of extensive regulatory requirements and resulting delays which are often very lengthy, estimates of the cost to complete nuclear plants have typically been unreliable. No assurance can be given that TVA's cost estimates (which have not been revised since the IRP was completed in 1994) would not change significantly if a decision were made to complete or operate any of TVA's inoperative units.

#### **Nuclear Fuel**

TVA owns all nuclear fuel held for its operating and deferred nuclear units. The net book value of this fuel was \$394 million as of December 31, 1999. TVA will fill future uranium requirements by a combination of term and spot purchase contracts while maintaining diversity of supply source. TVA currently has approximately 90 percent of its forward 5-year (2000-2004) uranium requirements either in inventory or under contract. TVA generally fills conversion, enrichment and fabrication services needs on a requirements basis under term contracts.

TVA's investment in the fuel being used in the Sequoyah, Watts Bar and Browns Ferry units is being amortized and accounted for as a fuel expense. The Bellefonte initial cores have been defabricated, and uranium from these cores has been used in the Sequoyah and Browns Ferry units with the net book value assigned accordingly.

#### **Nuclear Waste**

Spent Nuclear Fuel

The Nuclear Waste Policy Act of 1982 (the "NWPA") gives the federal government the

responsibility for the permanent disposal of spent nuclear fuel but gives each nuclear power system the responsibility for the cost of permanent disposal. The NWPA requires each nuclear power system to enter into a disposal contract with DOE for spent nuclear fuel. This contract requires each nuclear power system to pay a fee that is currently one mill per kWh for the net electricity generated by each of its reactors and sold. Although it is uncertain when DOE will be able to begin accepting spent nuclear fuel, TVA believes its spent-fuel efforts will ensure that sufficient atreactor storage is available to meet all of TVA's spent-fuel storage requirements until DOE is prepared to accept TVA's spent fuel.

TVA presently has the capability to store its spent fuel at Sequoyah through the year 2004, at Browns Ferry Units One and Two through the year 2013 and at Browns Ferry Unit Three through the year 2006. Based on a one-unit operation, TVA has the capability to store its spent fuel at Watts Bar through the year 2018.

TVA plans to extend storage capability through life-of-plant if necessary by using higher density racks in its existing storage pools or dry storage casks. Additional storage capacity increases will require NRC approval. However, all of the above methods of extending storage capability have been licensed by the NRC at other facilities.

#### Low-Level Radioactive Waste

Disposal costs for low-level radioactive waste that result from normal operation of nuclear units have increased significantly in recent years. Pursuant to the Low-Level Radioactive Waste Policy Act, each state is responsible for disposal of low-level waste generated in that state. States may form regional compacts to jointly fulfill their disposal responsibilities. The States of Tennessee and Alabama (where TVA's nuclear plants are located) have joined with other southeastern states to form the Southeast Compact Commission for Low-Level Radioactive Waste Management. This commission regulates the siting of new disposal facilities and the disposal of low-level waste within the southeastern states.

Until July 1995, the low-level waste generators located in the southeastern states were required to dispose of their radwaste at the Barnwell, South Carolina, disposal facility. At that

time, South Carolina withdrew from the Southeast Compact in order to open the Barnwell facility to all states except North Carolina. The states participating in the Southeast Compact had selected North Carolina as the host state to select, license and construct a new disposal site. Because of funding and licensability issues, however, it appears that North Carolina will not provide a new disposal site.

South Carolina has recently announced its intention to close the Barnwell disposal facility with the possibility of using it only for the disposal of South Carolina radwaste in the future. Because of the impending closure of the Barnwell facility and the cost of low-level radwaste disposal and access fees, TVA began a review of its storage and disposal options for low-level radwaste management. In July 1999, TVA began storage of the type of low-level radwaste that had previously been sent to Barnwell at the storage facilities built on TVA's plant sites in 1981. These facilities are sized to handle the anticipated storage needs for the foreseeable life of the plants. TVA continues to send dry radioactive waste to the Envirocare of Utah disposal facility in Clive, Utah, based on economics.

#### **Nuclear Insurance**

In 1988, Congress extended the indemnification and limitation of liability plan afforded the United States nuclear industry by the Price-Anderson Act for an additional 15 years. Certain provisions of the Price-Anderson Act are now due to expire on August 1, 2002. Under the Price-Anderson Act, the limit of liability from an accident at an NRC-licensed reactor is approximately \$9.3 billion (\$88 million for each of the NRC-licensed reactors in the United States), composed of primary and secondary layers of financial protection. This amount is periodically adjusted for inflation. For further information about this nuclear liability insurance and its deferred premium, see note 9 of the accompanying Financial Statements. In accordance with industry practice, TVA maintains certain liability insurance coverage for workers at its nuclear sites.

NRC regulations require nuclear power plant licensees to obtain, and TVA has acquired, onsite property damage insurance coverage of \$1.06 billion per nuclear site. Some of the nuclear property insurance may require the payment of

retrospective premiums of up to approximately \$19.4 million in the event that losses by another insured party or TVA exceed available funds. In accordance with NRC regulations, the proceeds of nuclear property insurance are first used to ensure that the reactor is in safe and stable condition and that it can be maintained in a condition that prevents significant risk to the public. Next, the proceeds are used for decontamination or, if necessary, decommissioning the reactor. Any excess proceeds insure against casualties to property.

#### **Decommissioning**

Consistent with NRC requirements, TVA has established decommissioning trusts to assure the availability of adequate funds for decommissioning TVA's nuclear plants. In prior years, TVA charged the excess of the annual decommissioning provision over earnings from any investments designated for funding decommissioning costs to depreciation expense. TVA made investments in amounts that are expected to grow to be sufficient to fully fund all estimated decommissioning costs. Beginning in fiscal 1998, TVA changed its method of accounting for decommissioning costs and related liabilities. TVA now recognizes, as incurred, all obligations related to closure and removal of its nuclear units. TVA measures the liability for closure at the present value of the estimated cash flows required to satisfy the related obligation and discounted at a determined riskfree rate of interest. The corresponding charge to recognize the additional obligation was effected through the creation of a regulatory asset. TVA further modified its method of accounting for decommissioning costs such that earnings from decommissioning fund investments, amortization expense of the decommissioning regulatory asset and interest expense on the decommissioning liability are deferred in accordance with Statement of Financial Accounting Standards No. 71, "Accounting for the Effects of Certain Types of Regulation." The book value of TVA's decommissioning fund investments was \$724 million at September 30, 1999. See notes 1 and 9 of the accompanying Financial Statements.

#### **ENVIRONMENTAL MATTERS**

TVA's activities are subject to various federal, state and local environmental statutes and regulations. Major areas of regulation affecting TVA's activities include air pollution control,

water pollution control and management and disposal of solid and hazardous wastes. Because TVA is a federal agency, it is subject only to those state and local environmental requirements for which Congress has clearly waived federal agency immunity. Respecting the major environmental areas (air, water and waste), limited waivers have been enacted by Congress. TVA's activities may also be subject to other narrower environmental requirements or to environmental requirements that affect only federal activities.

TVA has incurred and continues to incur substantial capital expenditures and operating expenses to comply with environmental requirements. See note 9 of the accompanying Financial Statements. Because these requirements change frequently, the total amount of these costs is not now determinable. It is anticipated that environmental requirements will become more stringent and that compliance costs will increase, perhaps by substantial amounts.

#### Air Pollution

Under the Clean Air Act, the United States Environmental Protection Agency ("EPA") has promulgated national ambient air quality standards for certain air pollutants, including sulfur dioxide, particulate matter and ozone. Coal-fired generating units such as TVA's are major sources of these pollutants or their precursors. TVA also operates other facilities that are smaller sources of these pollutants. The States of Alabama and Tennessee and the Commonwealth of Kentucky have promulgated implementation plans that regulate sources of air pollution within their boundaries, including TVA sources, in order to achieve and maintain the national ambient standards. TVA has installed air pollution control equipment and employs strategies to comply with applicable state-established emission limitations.

The acid rain control provisions of the 1990 Amendments to the Clean Air Act established a number of additional requirements for utilities. EPA and states are implementing these requirements in two phases. Through fiscal 1999, TVA had invested approximately \$940 million in capital for Phase 1 and Phase 2 compliance. TVA estimates it will spend an additional \$160 million to \$175 million in capital through 2005 to finalize the Phase 2 compliance measures.

Mountain air quality is an issue that is currently receiving significant attention. The Southern Appalachian Mountains Initiative is studying the effects of emissions from power plants and other sources on National Parks (including the Great Smoky Mountains and Shenandoah National Parks) and wilderness areas in the southeast. This assessment will be completed in 2001. It is too early to determine what, if any, additional power plant sulfur dioxide or nitrogen oxide controls might be required to improve mountain air quality.

During 1998, TVA unveiled a new clean air strategy that will reduce nitrogen oxide emissions from its coal fired plants by up to 168,000 tons per year by 2003. Under this strategy TVA will install equipment in at least ten units at various fossil plants that breaks down nitrogen oxide into nitrogen and water. The cost of implementing this strategy at ten units will be between \$500 million and \$600 million, in addition to amounts that TVA has already spent to comply with the 1990 Amendments to the Clean Air Act. The installation of new equipment will improve local and regional air quality and allow Tennessee Valley states greater flexibility for industrial and economic growth in the region.

TVA's new nitrogen oxide reduction strategy is consistent with the type of controls that would be needed to comply with EPA's mandated revisions to State Implementation Plans for reduction of ozone transport (the "NO<sub>x</sub> SIP Call Rule"). However, the strategy will not by itself bring TVA into compliance with expected revisions to state plans, depending on the level of generation from TVA's coal-fired units.

EPA has finalized new, more stringent particulate matter standards and a rule to reduce regional haze. These actions may require TVA to make additional reductions of sulfur dioxide emissions beyond those currently planned. TVA anticipates that compliance with the new regulations will be required after 2010.

TVA cannot with certainty determine the costs for additional reductions of nitrogen oxide, sulfur dioxide and particulate matter emissions beyond those required by the acid rain provisions of the 1990 Amendments to the Clean Air Act. In addition, recent court decisions have "remanded" the ozone and fine particulate standards, and "stayed" a key date in the NO<sub>x</sub> SIP Call Rule.

These actions create additional uncertainty regarding future air regulatory requirements facing utilities. However, the costs for these additional reductions could exceed \$2.5 billion.

EPA is investigating whether coal-fired utilities in the eastern United States, including TVA, may have modified their coal-fired boilers without complying with new source review requirements. The outcome of this investigation is ongoing and uncertain. However, EPA has issued TVA an administrative order directing TVA to put "newsource" controls on ten of its units and to evaluate whether more controls should be installed on other units. TVA has challenged the validity of this order. It is not possible to predict with certainty what impact implementation of EPA's order would have on TVA if TVA's challenge is unsuccessful. In a worst case scenario, however, TVA might have to incur in excess of \$2 billion of capital costs (net present value) by 2010 to 2015 in order to implement EPA's order. While the timing and amounts may vary, the control measures implemented pursuant to EPA's order are expected to be similar to those implemented under the environmental initiatives discussed above.

The Clinton Administration signed the Kyoto Protocol to the United Nations Framework Convention on Climate Change in November 1998. If ratified by the Senate, the protocol would require the United States to reduce its annual greenhouse gas emissions (including carbon dioxide) around 2008 to 2012 to a level seven percent below 1990 emission levels. Such a national requirement would likely require electric utilities to achieve similar reductions. The costs to utilities to achieve these reductions could be substantial.

#### Water Pollution

Under the Clean Water Act, every point source which discharges pollutants into waters of the United States must obtain a National Pollutant Discharge Elimination System ("NPDES") permit specifying the allowable quantity and characteristics of the pollutants discharged. TVA's various point sources have received NPDES permits, including all of its major generating units. Compliance with NPDES requirements has necessitated substantial expenditures and may require additional, substantial expenditures in the future as NPDES permits come up for renewal and applicable requirements become more stringent.

The Clean Water Act allows the permitting authority to establish thermal limits less stringent than the water quality criteria if the discharger can demonstrate that the alternate limit will assure protection and propagation of a balanced, indigenous aquatic population. TVA has now been issued alternate limits at several of its facilities, and it is meeting these limits. EPA has a rulemaking underway that would address the design of water intakes. The rulemaking is not expected to be completed for several years but could require changes to be made at TVA facilities. The cost of such changes is uncertain.

#### Solid and Hazardous Waste Management

Under the Resource Conservation and Recovery Act ("RCRA"), the storage, transportation and disposal of hazardous wastes are regulated by EPA and the states. RCRA also allows EPA and the states to regulate solid wastes, and the states have detailed permitting programs for this. TVA has detailed procedures in place designed to ensure compliance with all applicable requirements for the management of hazardous wastes. Additionally, TVA has instituted an approved supplier list for hazardous waste disposal contractors under which such contractors' financial status, compliance history and physical facilities and operations can be reviewed before they are allowed to treat or dispose of any of the hazardous wastes generated by TVA facilities. TVA does not itself operate any hazardous waste disposal or treatment facilities but does operate a permitted hazardous waste storage facility in Muscle Shoals, Alabama. TVA maintains solid waste disposal permits for the solid waste disposal areas (e.g., fly ash, scrubber sludge, demolition materials and asbestos) it operates at some of its plant sites. TVA's costs in this area have not been substantial, but applicable requirements change frequently and are expected to become more stringent.

Under the Comprehensive Environmental Response, Compensation, and Liability Act ("CER-CLA"), the release and cleanup of hazardous substances are regulated. Certain persons associated with the release of hazardous substances to the environment can be held responsible for their cleanup, regardless of when the substances were released or when the specific person may have been associated with the substance. This liability under CERCLA is generally viewed as joint and several. In a manner similar to other industries

and power systems, TVA has generated or used hazardous substances over the years. In connection with these activities, TVA has been identified as a potentially responsible party or received EPA information requests related to five non-TVA sites at which TVA hazardous substances may have been disposed. TVA's potential liabilities for its share of cleanup costs at all five of these sites are estimated to be less than \$100,000.

#### Miscellaneous

Polychlorinated biphenyls ("PCBs") have been widely used as insulating fluids in electric equipment such as transformers and capacitors. Use of this equipment and the cleanup of released PCBs are regulated by EPA under the Toxic Substances Control Act. The TVA power system uses thousands of pieces of equipment that contain some level of PCBs. This equipment, when maintained properly, may continue to be operated under TVA's PCB regulations for the remainder of its useful lives. However, TVA is phasing out much of this equipment as a matter of policy. The cost of phasing out the remainder of this equipment should not exceed \$40 million (for equipment replacement and disposal costs) but cannot be accurately determined at this time. TVA has detailed procedures in place to conform its operations to EPA's PCB regulations and has not incurred substantial costs in this area.

The National Emissions Standard for Hazardous Air Pollutants (NESHAP) defines the environmental protection requirements for the management of asbestos. Many of TVA's facilities were constructed at a time when asbestos was the insulation of choice by industry. Special handling and disposal are required when asbestos materials are removed. TVA is removing or encapsulating asbestos as appropriate.

There is public concern about whether there are adverse health effects from exposure to electric and magnetic fields ("EMF"). There are many sources of EMF, including electric transmission lines. Certain research, including a report by a National Academy of Sciences organization, has not found conclusive evidence that EMF causes adverse health effects. Other research, such as a report by the National Institute of Environmental Health Sciences, has found limited evidence that certain types of exposure to EMF are carcinogenic. Research in this area continues. Substantial

costs could be incurred by electric systems, including TVA, if EMF levels from transmission lines have to be reduced, but this appears unlikely at this time.

As a federal agency, TVA is required to consider the potential environmental effects of major federal actions affecting the quality of the human environment under the National Environmental Policy Act (the "NEPA") and implementing regulations and to make these evaluations available to the public. TVA has incorporated the NEPA review process into its decision making process. NEPA-related costs are incurred continuously but not in substantial amounts.

#### **INSURANCE**

TVA does not generally carry property damage or public liability insurance except (1) as may be required or appropriate with respect to nuclear facilities and (2) to the extent it may do so as part of an owner-controlled insurance program it has implemented for some large contracts requiring on-site labor. The Federal Employees' Com-

pensation Act governs liability for service-connected injuries to employees. See "Nuclear Power Program" — "Nuclear Insurance" herein and note 9 of the accompanying Financial Statements for additional information with respect to insurance.

#### PENDING LITIGATION

EPA has issued TVA an administrative order directing TVA to put "new-source" controls on ten of its units and to evaluate whether more controls should be installed on other units. TVA has challenged the validity of this order. See "Environmental Matters" — "Air Pollution" for a further discussion of this order.

TVA is a party to various other civil lawsuits and claims that have arisen in the ordinary course of its business. Although the outcome of these other civil lawsuits and claims cannot be predicted with any certainty, it is the opinion of TVA counsel that their ultimate outcome should not have a material adverse effect on TVA's financial position or results of operations.

#### **MANAGEMENT**

TVA is administered by a board of directors composed of three persons appointed by the President and confirmed by the Senate. The Board and selected officers, their ages, their years of employment with TVA and principal occupations for recent years are as follows:

Name and Title	Age	Year Commenced Employment	Year Term Expires
Craven Crowell	56	1993	2002
Chairman	4.0	1000	••••
Skila Harris	49	1999	2008
Director			
Glenn L. McCullough, Jr.	45	1999	2005
Director			
Oswald J. Zeringue	54	1989	
President and Chief Operating Officer			
John A. Scalice	52	1989	
Chief Nuclear Officer & Executive Vice President, TVA Nuclear			
David N. Smith	55	1995	
Chief Financial Officer & Executive Vice President, Financial Services			
Norman A. Zigrossi	64	1986	
Chief Administrative Officer & Executive Vice President, Business			
Services			
Edward S. Christenbury	58	1987	
General Counsel and Secretary			

Mr. Crowell was appointed to the Board in July 1993. Prior to his current position, he served as Chief of Staff for Jim Sasser, Tennessee's thensenior United States Senator (1989-1993), as Vice President of TVA's Office of Governmental & Public Affairs (1988-1989) and as TVA's Director of Information (1980-1988).

Ms. Harris was appointed to the Board in November 1999. Prior to her current position, she served at DOE as Executive Director of the Secretary of Energy Advisory Board. From 1993 until 1997, she was a Special Assistant to Vice President Gore and Ms. Gore's Chief of Staff. She came to the White House from Steiner-Liff Iron and Metal Company in Nashville, Tennessee, where she was Vice President for Development and Compliance. Ms. Harris served as a project manager at the U.S. Synthetic Fuels Corporation, and she was with DOE during the Carter Administration. She has also held positions with management and engineering consulting firms specializing in energy-related work.

Mr. McCullough was appointed to the Board in November 1999, having served as the mayor of Tupelo, Mississippi, since 1997. Prior to his election as mayor of Tupelo, he was the director of the Mississippi office of the Appalachian Regional Commission. Director McCullough also worked in the family business, McCullough Steel Products, for 12 years.

Mr. Zeringue was named President and Chief Operating Officer in April 1998. Prior to his current position, he served as Chief Nuclear Officer & Executive Vice President (1997-1998), as Senior Vice President, Nuclear Operations (1993-1997), as Browns Ferry Site Vice President (1989-1993) and as Plant Manager of Palo Verde Nuclear Station, Arizona Public Service Company (1987-1989).

Mr. Scalice was named Chief Nuclear Officer & Executive Vice President, TVA Nuclear in June 1998. Prior to his current position, he served as Acting Chief Nuclear Officer (beginning April 1998), as Senior Vice President of Nuclear Operations (1997-1998), as Watts Bar Site Vice President (1993-1997), as Plant Manager of Browns Ferry Nuclear Plant (1991-1993), as Plant Manager of Watts Bar Nuclear Plant (1989-1991) and as Plant Manager of Shoreham Nuclear Power Station, Long Island Lighting Company (1989).

Mr. Smith was named Chief Financial Officer in January 1995 and additionally was named Executive Vice President, Financial Services, in October 1996. Prior to his current position, he

served as Executive Director of Odyssey Financial (1993-1994), as Vice President of Finance of LTV Corporation (1991-1993) and as Assistant Treasurer and Director of Corporate Finance of LTV Corporation (1986-1991).

Mr. Zigrossi was named Chief Administrative Officer in February 1994 and additionally was named Executive Vice President, Business Services, in October 1996. Prior to his current position, he served as TVA's President, Resource Group (1992-1994) and as TVA's Inspector General (1986-1992).

Mr. Christenbury assumed the position of General Counsel of TVA in January 1987. Prior to his current position, he served as an Assistant General Counsel at the NRC (1980-1987).

#### **EMPLOYEES**

On September 30, 1999, TVA had about 13,300 employees, of which approximately 5,000 were trades and labor employees. Neither the federal labor relations laws covering most private sector employers nor those covering most federal agencies apply to TVA. However, the Board has a long-standing policy of recognizing and dealing with recognized representatives of its employees. Federal law prohibits TVA employees from engaging in strikes against TVA.

TVA has entered into separate long-term recognition agreements with the Tennessee Valley Trades and Labor Annual Council ("Annual Council"), the International Brotherhood of Teamsters ("Teamsters"), and four unions that represent TVA's salary policy (white collar) employees (collectively, the "Salary Policy Unions"). These agreements typically provide for negotiation of most provisions except monetary matters about every three years. Wage and salary and benefit negotiations or adjustments generally occur annually. Unresolved disputes over rates of pay for trades and labor employees are resolved by binding decisions of the Secretary of Labor. Pay and monetary benefits disputes for other represented employees are resolved through binding arbitration. The recognition agreements with the Annual Council and the Teamsters recognize these entities or their successors through 2007. The agreements with the Salary Policy Unions recognize these entities or their successors through 2012.

TVA currently has separate collective bargaining agreements in place with the Teamsters, the Annual Council and each of the Salary Policy Unions. With the expiration of parts of the collective bargaining agreement between TVA and the Annual Council in December 1997, TVA exercised its right to give a 90-day notice to reopen the remainder of the agreement with the Annual Council and potentially to cancel the agreement. In April 1998, negotiations pursuant to this reopener ended in impasse. To date, TVA has not exercised its right to cancel the agreement, and there is a pending lawsuit by the Annual Council against TVA in which the Annual Council claims that TVA cannot cancel the agreement at this time. Additionally, TVA has notified the Annual Council that a dispute exists concerning the employees who constitute an appropriate bargaining unit. Following a hearing on this matter, TVA issued a decision finding that one bargaining unit is appropriate for its power organizations and that another bargaining unit is appropriate for trades and labor work within two other organizations. These two units would replace the six separate bargaining units that represent trades and labor employees covered by the TVA-Annual Council agreement. The Annual Council's position is that no bargaining unit dispute exists. Under the collective bargaining agreement, bargaining unit disputes may be appealed to arbitration. TVA and the Annual Council are again conducting negotiations on a new collective bargaining agreement covering annual trades and labor employees. TVA has advised the Annual Council that it will hold any further action on the bargaining unit issue in abeyance during these negotiations.

Salaries of regular TVA employees are limited by a federal pay cap (Executive Level IV, currently \$122,400). The pay cap makes it a challenge for TVA to recruit and retain top management talent. TVA has addressed this issue by developing and implementing supplementary compensation arrangements, which have substantially reduced the impact of the pay cap. TVA recently contracted for the services of a national compensation management firm to review TVA's compensation practices and recommend modifications which would minimize the impact of the pay cap when competing with utilities and other companies for executive talent. Based on that firm's recommendations, TVA has developed and implemented revised executive compensation practices to enhance TVA's ability to attract and retain the caliber of executive talent required to manage one of the largest power systems in the country. TVA believes the implementation of these arrangements is within its legal authority. In the past, the General Accounting Office ("GAO") has expressed the opinion that some of TVA's compensation arrangements are not within TVA's legal authority. However, GAO has no authority to issue binding legal opinions on this matter or to stop any TVA payments. Congress has been aware of TVA's supplemental compensation arrangements and has not taken any action that would undermine TVA's position that the arrangements are within its legal authority.

In October 1995, the President issued an Executive Order requiring government corporations, including TVA, to submit information to the Office of Management and Budget ("OMB") on bonuses paid to its senior executives. TVA submits information on these bonuses annually to OMB and also publicly disseminates this information. OMB approval of TVA's bonuses is not required.

## CERTAIN PROVISIONS OF THE TENNESSEE VALLEY AUTHORITY ACT

The following summary of certain provisions of the Act is **not complete** and is qualified in its entirety by reference to the full text of the Act.

#### Payments in Lieu of Taxes

TVA is not subject to federal income taxes or to taxation by states or their subdivisions. However, the Act requires TVA to make payments in lieu of taxes to states and counties in which the Corporation conducts power operations. The basic amount of these payments is 5 percent of gross revenues from the sale of power to entities other than federal agencies during the preceding year, with a provision for minimum payments under certain circumstances.

#### Payments to the Treasury

The Act requires TVA to make certain payments to the Treasury each year from Net Power Proceeds in excess of those required for debt service, as a return on and reduction of the Appropriation Investment. The Appropriation Investment totaled \$548 million as of September 30, 1999. Net Power Proceeds are defined as the

remainder of gross power revenues from TVA's power program

#### after deducting

- the costs of operating, maintaining and administering its power properties (including multiple-purpose properties in the proportion that multiple-purpose costs are allocated to power) and
- payments to states and counties in lieu of taxes.

#### but before deducting

depreciation accruals or other charges representing the amortization of capital expenditures,

#### plus

 the net proceeds of the sale or other disposition of any interest in TVA's power properties that constitute an operating unit or system.

#### Acquisition of Real Estate

The Act empowers TVA to acquire real estate in the name of the United States of America by purchase or by exercise of the right of eminent domain, "and thereupon all such real estate shall be entrusted to the Corporation as the agent of the United States to accomplish the purposes of [the] Act." Thus, you should read and construe all references in this Statement to TVA properties, and to the amounts invested in TVA properties, in the light of this provision of the Act.

# THE BASIC RESOLUTION; POWER BONDS, DISCOUNT NOTES AND OTHER INDEBTEDNESS

TVA issues Power Bonds pursuant to Section 15d of the Act and pursuant to the Basic Resolution. At December 31, 1999, TVA had U.S. \$21.1 billion, DM 1.5 billion (issued in September 1996) and £200 million (issued in December 1998) principal amount of Power Bonds outstanding. TVA may issue Power Bonds only to provide capital for TVA's power program (including refunding any Evidences of Indebtedness issued for like purposes) and only as authorized by law at the time of issuance. Power Bonds

are payable as to both principal and interest solely from Net Power Proceeds, but TVA may, at its option, pay Power Bonds from the proceeds of refunding obligations or other funds legally available for such payment. *Power Bonds are not obligations of, or guaranteed by, the United States of America*. Net Power Proceeds for fiscal 1999, 1998 and 1997 were \$3.1 billion, \$3.2 billion and \$2.9 billion, respectively. Power Bonds of each series must be further authorized by Supplemental Resolution.

TVA intends from time to time to issue New Power Bonds with maturities and on terms determined in light of market conditions at the time of sale. TVA may sell New Power Bonds to dealers or underwriters, who may resell the New Power Bonds in public offerings or otherwise. Additionally, TVA may sell New Power Bonds directly or through other entities.

The offering circular, and any appropriate amendment or supplement to the offering circular, for each offering of New Power Bonds, except for FISBS, will set forth the following information:

- (1) the aggregate principal amount, (2) maturity,
- (3) interest rate or method for determining such rate, (4) interest payment dates, if any,
- (5) purchase price to be paid to TVA, (6) any terms for redemption or other special terms,
- (7) form and denomination of New Power Bonds,
- (8) information as to any stock exchange listing,
- (9) the names of any dealers, underwriters or agents, (10) a description of any amendments or supplements to the Basic Resolution in connection with the sale of the New Power Bonds, and
- (11) other terms of the New Power Bonds.

FISBS are New Power Bonds that TVA may issue from time to time in installments with maturities from one year to fifty years. TVA may offer FISBS for sale from time to time to members of a group of securities dealers selected by TVA, who will resell the FISBS. The aggregate principal amount of all Installment Bonds outstanding at any one time will not exceed \$4 billion. The maximum effective rate payable on any Installment Bonds will not exceed 10 percent. Information relating to FISBS will be set forth in an Installment Bonds offering circular and in any appropriate amendments or supplements to the offering circular. At the time of each sale, TVA will determine if the FISBS being sold will be subject to redemption prior to the maturity date

and will establish the purchase price, principal amount, interest rate or interest rate formula, maturity date and certain other terms of such sale.

TVA also issues Discount Notes pursuant to Section 15d of the Act and in accord with Section 2.5 of the Basic Resolution. As of December 31, 1999, TVA had approximately \$3.9 billion in Discount Notes outstanding. Discount Notes are payable solely from Net Power Proceeds, but TVA may, at its option, pay Discount Notes from the proceeds of refunding obligations or other funds legally available for such payment. Discount Notes are not obligations of, or guaranteed by, the United States of America. TVA intends to offer Discount Notes for sale on a continuous basis to a group of securities dealers selected by TVA, who will resell the notes. TVA will issue Discount Notes in a form and upon terms and conditions as it deems appropriate. Certain information respecting Discount Notes will be set forth in a Discount Notes offering circular and any appropriate supplement to the offering circular.

TVA from time to time may issue Other Indebtedness, in addition to New Power Bonds and Discount Notes, to assist in financing its Power Program. TVA issues Other Indebtedness, such as Quarterly Income Debt Securities ("QIDS"), pursuant to Section 15d of the Act and under appropriate authorizing resolutions. At December 31, 1999, TVA had outstanding \$1.1 billion principal amount of QIDS. TVA may issue subordinated debt securities, such as QIDS, from time to time with maturities and on terms determined in light of market conditions at the time of sale. TVA may sell subordinated debt securities to dealers or underwriters, who may resell them in public offerings or otherwise. Additionally, TVA may sell subordinated debt securities directly or through other entities. TVA subordinated debt securities will be payable as to both principal and interest solely from Net Power Proceeds, but TVA may, at its option, pay subordinated debt securities from the proceeds of refunding obligations or other funds legally available for such payment. Subordinated debt securities are not obligations of, or guaranteed by, the United States of America.

An offering circular, and any appropriate amendment or supplement to the offering circular, for each offering of Other Indebtedness will set forth the following information: (1) the aggregate principal amount, (2) maturity, (3) interest rate or method for determining such rate, (4) interest payment dates, if any, (5) purchase price to be paid to TVA, (6) any terms for redemption or other special terms, (7) form and denomination of Other Indebtedness, (8) information as to any stock exchange listing, (9) the names of any dealers, underwriters or agents, and (10) other terms of Other Indebtedness. Other Indebtedness will not be obligations of, or guaranteed by, the United States of America.

The following summary of certain provisions of the Basic Resolution is **not complete** and is qualified in its entirety by reference to the full text of the Basic Resolution. See also "Recent Legislation."

#### **Application of Net Power Proceeds**

Section 2.3 of the Basic Resolution provides as follows:

Net Power Proceeds shall be applied, and the Corporation hereby specifically pledges them for application, first to payments due as interest on Bonds, on Bond Anticipation Obligations, and on any Evidences of Indebtedness issued pursuant to Section 2.5 which rank on a parity with Bonds as to interest; to payments of the principal due on Bonds for the payment of which other provisions have not been made and on any Evidences of Indebtedness issued pursuant to Section 2.5 which rank on a parity with Bonds as to principal and for the payment of which other provisions have not been made; and to meeting requirements of sinking funds or other analogous funds under any Supplemental Resolutions. The remaining Net Power Proceeds shall be used only for:

- (a) Required interest payments on any Evidences of Indebtedness issued pursuant to Section 2.5 which do not rank on a parity with Bonds as to interest.
- (b) Required payments of or on account of principal of any Evidences of Indebtedness which do not rank on a parity with Bonds as to principal.
- (c) Minimum payments into the United States Treasury required by the Act in

repayment of and as a return on the Appropriation Investment.

(d) Investment in Power Assets, additional reductions of the Corporation's capital obligations, and other lawful purposes related to the Power Program; provided, however, that payments into the United States Treasury in any fiscal year in reduction of the Appropriation Investment in addition to the minimum amounts required for such purpose by the Act may be made only if there is a net reduction during such year in the dollar amount of outstanding Evidences of Indebtedness issued for capital purposes, and only to such extent that the percentage of aggregate reduction in the Appropriation Investment during such year does not exceed the percentage of net reduction during the year in the dollar amount of outstanding Evidences of Indebtedness issued for capital purposes.

Section 2.4 of the Basic Resolution provides as follows:

The Corporation, having first adopted a Supplemental Resolution authorizing the issuance of a series of Bonds and pending such issuance, may issue Bond Anticipation Obligations and renewals thereof (including Interim Obligations to the Secretary of the Treasury) to be paid from the proceeds of such series of Bonds when issued or from other funds that may be available for that purpose.

Section 2.5 of the Basic Resolution provides as follows:

To assist in financing its Power Program the Corporation may issue Evidences of Indebtedness other than Bonds and Bond Anticipation Obligations, which may be payable out of Net Power Proceeds subject to the provisions of Section 2.3 hereof. Such other Evidences of Indebtedness may rank on a parity with but shall not rank ahead of the Bonds as to payments on account of the principal thereof or the interest thereon.

See "Recent Legislation" for a discussion of legislation relating to appropriations for TVA's nonpower programs and the funding of such programs, including the use of power revenues.

#### Rate Covenant

Section 3.2 of the Basic Resolution provides as follows:

The Corporation shall fix, maintain, and collect rates for power sufficient to meet in each fiscal year the requirements of that portion of the present subsection (f) of section 15d of the Act which reads as follows:

The Corporation shall charge rates for power which will produce gross revenues sufficient to provide funds for operation, maintenance, and administration of its power system; payments to States and counties in lieu of taxes; debt service on outstanding bonds, including provision and maintenance of reserve funds and other funds established in connection therewith; payments to the Treasury as a return on the appropriation investment pursuant to subsection (e) hereof; payment to the Treasury of the repayment sums specified in subsection (e) hereof; and such additional margin as the Board may consider desirable for investment in power system assets, retirement of outstanding bonds in advance of maturity, additional reduction of appropriation investment, and other purposes connected with the Corporation's power business, having due regard for the primary objectives of the Act, including the objective that power shall be sold at rates as low as are feasible.

For purposes of this Resolution, "debt service on outstanding bonds," as used in the above provision of the Act, shall mean for any fiscal year the sum of all amounts required to be (a) paid during such fiscal year as interest on Evidences of Indebtedness, (b) accumulated in such fiscal year in any sinking or other analogous fund provided for in connection with any Evidences of Indebtedness, and (c) paid in such fiscal year on account of the principal of any Evidences of Indebtedness for the payment of which funds will not be available from sinking or other analogous funds, from the proceeds of refunding issues, or from other sources; provided, however, that for purposes of clause (c) of this definition Bond Anticipation Obligations and renewals thereof shall be deemed to mature in the proportions and at the times provided for paying or setting aside funds for

the payment of the principal of the authorized Bonds in anticipation of the issuance of which such Bond Anticipation Obligations were issued.

The rates for power fixed by the Corporation shall also be sufficient so that they would cover all requirements of the above-quoted provision of subsection (f) of section 15d of the Act if, in such requirements, there were substituted for "debt service on outstanding bonds" for any fiscal year the amount which if applied annually for 35 years would retire, with interest at the rates applicable thereto, the originally issued amounts of all series of Bonds and other Evidences of Indebtedness, any part of which was outstanding on October 1 of such year.

### Covenant for Protection of Bondholders' Investment

Under the Act and Section 3.3 of the Basic Resolution, TVA must, in each successive five-year period beginning October 1, 1960, use an amount of Net Power Proceeds at least equal to the sum of (1) depreciation accruals and other charges representing the amortization of capital expenditures and (2) the net proceeds from any disposition of power facilities for either (a) the reduction of its capital obligations (including Evidences of Indebtedness and the Appropriation Investment) or (b) investment in Power Assets.

#### **Depreciation**

The Basic Resolution requires TVA to accrue, in accordance with a recognized method, annual amounts for depreciation of its power properties (except land and other nondepreciable property) that will amortize their original cost less anticipated net salvage value within their expected useful lives. TVA has provided allowances for depreciation of its power properties (except land and other nondepreciable property) on a straight-line basis during their expected useful lives.

## Issuance of Additional Bonds and Other Evidences of Indebtedness

The Act limits the issuance of Evidences of Indebtedness by TVA to a total of \$30 billion outstanding at any one time. At December 31, 1999, TVA had approximately U.S. \$25.1 billion, DM 1.5 billion (issued in September 1996) and

£200 million (issued in December 1998) of Evidences of Indebtedness outstanding. In connection with the issuance of TVA's DM and British pound sterling indebtedness, TVA entered into currency swap agreements to hedge its foreign currency exposure. The Basic Resolution and the Act permit the issuance of Power Bonds only to provide capital for TVA's power program, including the refunding of any Evidences of Indebtedness issued for that purpose.

Power Bonds, the terms and conditions of which may not be inconsistent with the Basic Resolution, must also be authorized by Supplemental Resolution. The Basic Resolution provides that each Supplemental Resolution authorizing the issuance of Power Bonds must contain a finding by the Board that after the authorized Power Bonds have been issued, gross revenues from TVA's power program will be adequate to meet the requirements of the Basic Resolution with respect to rates and the application of depreciation accruals. These requirements are described under "The Basic Resolution; Power Bonds, Discount Notes and Other Indebtedness" - "Rate Covenant" and "Covenant for Protection of Bondholders' Investment."

Pending the issuance of Power Bonds authorized by a Supplemental Resolution, TVA may issue Bond Anticipation Obligations and renewals of Bond Anticipation Obligations (including Interim Obligations to the Secretary of the Treasury), to be paid from the proceeds of such Power Bonds when issued or from other funds that may be available for that purpose.

TVA may also issue Evidences of Indebtedness other than Power Bonds and Bond Anticipation Obligations, such as Discount Notes, to assist in financing TVA's power program. They may be payable out of Net Power Proceeds subject to the provisions of Section 2.3 of the Basic Resolution. They may not rank ahead of the Power Bonds as to principal or interest.

#### Mortgaging and Disposal of Power Properties

TVA may not mortgage any part of its power properties and may not dispose of all or any substantial portion of these properties unless it provides for a continuance of the interest, principal and sinking fund payments due and to become due on all outstanding Evidences of Indebtedness,

or for the retirement of such Evidences of Indebtedness.

### Modifications of Resolutions and Outstanding Bonds

The Basic Resolution provides for amendments to it, to any Supplemental Resolution and to any outstanding Power Bonds. Generally, TVA may make amendments to the respective rights and obligations of TVA and the bondholders with the written consent of the holders of at least 66<sup>2</sup>/<sub>3</sub> percent in principal amount of the outstanding Power Bonds to which the amendment applies. However, TVA may not make changes in the maturity, principal amount, redemption premium or rate of interest or maturity of any interest installment, with respect to any Power Bond, or in the above percentage for any such consent, without the consent of the holder of such Power Bond.

Additionally, TVA may amend the Basic Resolution or any Supplemental Resolution without the consent of the bondholders in order (1) to close the Basic Resolution against the issuance of additional Power Bonds or to restrict such issuance by imposing additional conditions or restrictions; (2) to add other covenants and agreements to be observed by TVA or to eliminate any right, power or privilege conferred upon TVA by the Basic Resolution; (3) to modify any provisions to release TVA from any of its obligations, covenants, agreements, limitations, conditions or restrictions, provided that such modification or release shall not become effective with respect to any Power Bonds issued prior to the adoption of such amendment; (4) to correct any defect, ambiguity or inconsistency in, or to make provisions in regard to matters or questions arising under, the Basic Resolution or any Supplemental Resolution, so long as such amendments are not contrary to, or inconsistent with, the Basic Resolution or such Supplemental Resolution; or (5) to make any other modification or amendment which the Board by resolution determines will not materially and adversely affect the interests of holders of the Power Bonds.

#### **Events of Default**

Any of the following shall be deemed an Event of Default under the Basic Resolution:
(1) default in the payment of the principal or redemption price of any Power Bond when due

and payable at maturity, by call for redemption, or otherwise; (2) default in the payment of any installment of interest on any Power Bond when due and payable for more than 30 days; or (3) failure of TVA to duly perform any other covenant, condition or agreement contained in the Power Bonds or in the Basic Resolution or any Supplemental Resolution for 90 days after written notice specifying such failure has been given to TVA by the holders of at least five percent in aggregate principal amount of the then-outstanding Power Bonds.

Upon any such Event of Default, the holders of the Power Bonds may proceed to protect and enforce their respective rights, subject to the restrictions described below. The holders of at least five percent in aggregate principal amount of Power Bonds then outstanding shall, subject to certain restrictions, have the right and power to institute a proceeding (1) to enforce TVA's covenants and agreements, (2) to enjoin any acts in violation of the rights of holders of Power Bonds, and (3) to protect and enforce the rights of holders of Power Bonds. Power Bonds do not provide for acceleration upon an Event of Default. Such holders have no right to bring any such action or proceeding against TVA unless they have given TVA written notice of an Event of Default and TVA has had a reasonable opportunity to take appropriate corrective action with respect thereto and has failed or refused to do so.

Holders of a majority in aggregate principal amount of the outstanding Power Bonds have the right to direct the time, method and place of conducting any proceeding for any remedy available and may waive any default and its consequences, except a default in the payment of the principal of or premium, if any, or interest on any Power Bonds.

## Fourth Amendatory Resolution to the Basic Resolution

On March 25, 1992, TVA adopted a resolution amending the Basic Resolution, entitled "Fourth Amendatory Resolution to Basic Tennessee Valley Authority Power Bond Resolution" (the "Fourth Amendatory Resolution"). The amendments to the Basic Resolution made by the Fourth Amendatory Resolution were to become effective only when either (1) all Power Bonds issued prior to the date of adoption of the Fourth

Amendatory Resolution ceased to be outstanding (which would occur not later than November 15, 2029) or (2) the holders of at least 66<sup>2</sup>/<sub>3</sub> percent of the principal amount of all then-outstanding Power Bonds issued prior to the adoption of the Fourth Amendatory Resolution consented in writing to such amendments. On December 16, 1999, TVA redeemed the last series of Power Bonds issued prior to the adoption of the Fourth Amendatory Resolution, and this amendatory resolution became effective at that time and applies to all outstanding Power Bonds. The Fourth Amendatory Resolution (1) deleted from the Basic Resolution limitations on issuance of Power Bonds formerly set forth as Section 3.4 thereof and (2) amended the Basic Resolution to permit issuance of other Evidences of Indebtedness under Section 2.5 thereof that rank on a parity with Power Bonds as to principal and interest. With the deletion of Section 3.4 of the Basic Resolution, Sections 3.5 through 3.10 were renumbered as appropriate.

#### Recent Legislation

In October 1997, Congress enacted the Energy and Water Development Appropriations Act, 1998, Pub. L. No. 105-62, 111 Stat. 1320, 1338 (1997). The paragraph captioned "TENNESSEE VALLEY AUTHORITY" in Title IV of this act (the "Appropriations Act paragraph") requires TVA, beginning with October 1, 1998, to fund nonpower programs that constitute "essential stewardship activities" with revenues derived from one or more of various sources, including power revenues, notwithstanding provisions of the TVA Act and power bond covenants to the contrary.

The Appropriations Act paragraph states:

For the purpose of carrying out the provisions of the Tennessee Valley Authority Act of 1933, as amended (16 U.S.C. ch. 12A), including hire, maintenance, and operation of aircraft, and purchase and hire of passenger motor vehicles, \$70,000,000, to remain available until expended, of which \$6,900,000 shall be available for operation, maintenance, surveillance, and improvement of Land Between the Lakes; and for essential stewardship activities for which appropriations were provided to the Tennessee Valley Authority in Public Law 104-206, such sums as are necessary in fiscal

year 1999 and thereafter, to be derived only from one or more of the following sources: nonpower fund balances and collections; investment returns of the nonpower program; applied programmatic savings in the power and nonpower programs; savings from the suspension of bonuses and awards; savings from reductions in memberships and contributions; increases in collections resulting from nonpower activities, including user fees; or increases in charges to private and public utilities both investor and cooperatively owned, as well as to direct load customers: Provided, That such funds are available to fund the stewardship activities under this paragraph, notwithstanding sections 11, 14, 15, 29, or other provisions of the Tennessee Valley Authority Act, as amended, or provisions of the TVA power bond covenants: Provided further, That the savings from, and revenue adjustments to, the TVA budget in fiscal year 1999 and thereafter shall be sufficient to fund the aforementioned stewardship activities such that the net spending authority and resulting outlays for these activities shall not exceed \$0 in fiscal year 1999 and thereafter.

Congress provided no appropriations for TVA's nonpower programs for fiscal 2000. In compliance with the Appropriations Act paragraph, TVA is and will continue funding its essential stewardship activities with funds from its power program (and other available funds) to the extent that Congress does not make appropriations for these activities.

As part of the October 1998 appropriations legislation, Congress also permitted TVA to repurchase all of its outstanding \$3.2 billion in Power Bonds issued to the Federal Financing Bank (the "FFB") by paying principal and accrued interest only, without obligation to pay any additional amounts under the terms of these Power Bonds. This part of the legislation also requires TVA to apply a certain portion of the interest savings from the repurchase of its FFB Power Bonds to debt reduction. Pursuant to this legislation, TVA repurchased all of its outstanding Power Bonds issued to the FFB using funds obtained from short-term borrowings. TVA has not issued Power Bonds to the FFB since 1991, and this legislation prohibits TVA from doing so in the future.

#### INDEPENDENT ACCOUNTANTS

The financial statements of TVA at September 30, 1999 and 1998, and for each of the three fiscal years in the period ended September 30, 1999, appended hereto as part of this Information Statement, have been audited by PricewaterhouseCoopers LLP, independent accountants, as set forth in their report, dated October 22, 1999, which report is also appended hereto.

\* \* \* \* \*

Any statements in this Statement involving matters of opinion, regardless of whether expressly so identified, are opinions only and not factual representations. This Statement is not a contract with the purchaser of any of the New Power Bonds, Discount Notes or Other Indebtedness.

This Statement has been approved by a duly authorized officer of the Tennessee Valley Authority.

Tennessee Valley Authority

By: /s/ JOHN M. HOSKINS

John M. Hoskins
Vice President and Treasurer

Dated February 4, 2000

#### TENNESSEE VALLEY AUTHORITY

#### FINANCIAL STATEMENTS

#### CONTENTS

	Page
Balance Sheets	F-2
Statements of Income — Power Program	F-3
Statements of Cash Flows	F-4
Statements of Changes in Proprietary Capital — Power Program	F-5
Statements of Net Expense — Nonpower Programs	F-5
Statements of Changes in Proprietary Capital — Nonpower Programs	F-5
Notes to Financial Statements	F-6
Report of Independent Accountants	F-19
Report of Management	F-20

#### BALANCE SHEETS At September 30

	Power p	rogram	All pro	grams
	1999	1998	1999	1998
		(in mi	llions)	
Current Assets				
Cash and cash equivalents	\$ 103	\$ 391	\$ 160	\$ 451
Accounts receivable	730	796	730	796
Inventories at average cost and other				
Fuel	178	153	178	153
Other	307	316	307	316
Total current assets	1,318	1,656	1,375	1,716
Property, Plant, and Equipment				
Completed plant	29,569	29,055	30,685	30,166
Less accumulated depreciation	(8,762)	(7,945)	(9,074)	(8,243)
Net completed plant	20,807	21,110	21,611	21,923
Construction in progress	730	548	730	558
Deferred nuclear generating units	6,320	6,311	6,320	6,311
Nuclear fuel and capital leases	560	922	560	922
Total property, plant, and equipment	28,417	28,891	29,221	29,714
Investment Funds	731	578	731	578
Deferred Charges and Other Assets				
Loans and other long-term receivables	122	104	153	151
Debt issue and reacquisition costs	1,188	861	1,188	861
Other deferred charges	1,610	1,525	1,610	1,525
Total deferred charges and other assets	2,920	2,490	2,951	2,537
Total assets	\$33,386	\$33,615	\$34,278	\$34,545
Current Liabilities				
Accounts payable	\$ 493	\$ 521	\$ 521	\$ 538
Accrued liabilities	178	175	182	180
Accrued interest	464	487	464	487
Discount notes	982	1,757	982	1,757
Current maturities of long-term debt	1,000	1,500	1,000	1,500
Total current liabilities	3,117	4,440	3,149	4,462
Other Liabilities	2,156	2,007	2,156	2,007
Long-Term Debt				
Public bonds — senior	23,294	19,127	23,294	19,127
Federal Financing Bank — senior	_	3,200	_	3,200
Public bonds — subordinated	1,100	1,100	1,100	1,100
Unamortized discount and other adjustments	<u>(491</u> )	(407)	(491)	(407)
Total long-term debt	23,903	23,020	23,903	23,020
Proprietary Capital				
Appropriation investment	548	568	4,964	4,936
Retained earnings reinvested in power program	3,662	3,580	3,662	3,580
Accumulated net expense of nonpower programs			(3,556)	(3,460)
Total proprietary capital	4,210	4,148	5,070	5,056
Total liabilities and proprietary capital	\$33,386	\$33,615	\$34,278	\$34,545

## STATEMENTS OF INCOME — POWER PROGRAM For the Years Ended September 30

	1999	1998	1997		
	(	(in millions)			
Operating Revenues					
Sales of electricity					
Municipalities and cooperatives	\$5,510	\$5,554	\$4,811		
Industries directly served	642	523	464		
Federal agencies and other	357	556	561		
Other revenue	86	96	98		
Total operating revenues	6,595	6,729	5,934		
Operating Expenses					
Fuel and purchased power	1,777	1,900	1,593		
Operating and maintenance	1,384	1,347	1,201		
Depreciation and amortization	1,181	1,038	1,014		
Tax-equivalents	304	264	272		
Accelerated amortization (notes 1 and 7)	261				
Total operating expenses	4,907	4,549	4,080		
Operating Income	1,688	2,180	1,854		
Other (expense) income, net	(9)	12	157		
Income before interest expense and cumulative effect of change in accounting					
principle	1,679	2,192	2,011		
Interest Expense					
Interest expense  Interest on debt	1,753	1,930	1,993		
Amortization of debt discount, issue, and reacquisition costs, net	60	1,930	91		
Allowance for funds used during construction	(36)	(55)	(81)		
<u> </u>					
Net interest expense	1,777	1,959	2,003		
Cumulative effect of change in accounting principle (notes 1 and 7)	217				
Net income	\$ 119	\$ 233	\$ 8		

#### STATEMENTS OF CASH FLOWS For the Years Ended September 30

	Power program				All programs							
		1999		1998		1997	1999 1998		1998		1997	
						(in mil	lio	ns)				
<b>Cash Flows from Operating Activities</b>												
Net power income	\$	119	\$	233	\$	8	\$	119	\$	233	\$	8
Net expense of nonpower programs Items not requiring (providing) cash		_		_		_		(96)		(91)		(121)
Depreciation and amortization		1,250		1,090		1,066		1,263		1,103		1,080
Accelerated amortization		261		_		_		261		_		_
Allowance for funds used during												
construction		(36)		(55)		(81)		(36)		(55)		(81)
Nuclear fuel amortization		177		264		196		177		264		196
Cumulative effect of change in accounting												
principle		(217)						(217)		_		
Other, net		(26)		(2)		(151)		_		9		(151)
Changes in current assets and liabilities				(0.5)		(2.4)				(00)		(21)
Accounts receivable		65		(95)		(24)		65		(89)		(21)
Inventories and other		(35)		(72)		(19)		(35)		(72)		(19)
Accounts payable and accrued liabilities		(19)		72		56		(21)		59		52
Accrued interest		(23)		(11)		1		(23)		(11)		1
Other		(85)		(30)	_	14	_	(85)	_	(36)	_	14
Net cash provided by operating activities		1,431		1,394		1,066		1,372		1,314		958
Cash Flows from Investing Activities												
Construction expenditures		(829)		(637)		(722)		(830)		(642)		(733)
Allowance for funds used during												
construction		36		55		81		36		55		81
Nuclear fuel		(135)		(151)		(159)		(135)		(151)		(159)
Proceeds from sale of investments		_		_		513				_		513
Purchases of investments		_		_		(483)		_		_		(483)
Proceeds from sale of loans receivable		(20)		<u> </u>		211		(21)		<u> </u>		211
Other, net	_	(28)	_	(9)	_	(21)	_	(21)	_	(8)	_	(13)
Net cash used in investing activities		(956)		(742)		(580)		(950)		(746)		(583)
Cash Flows from Financing Activities												
Long-term debt		4.506		4 60 5		2 100		4.506		4.605		2 100
Issues		4,506		4,625		3,100		4,506		4,625		3,100
Redemptions	(	4,046)	(	(4,930)		(3,829)		(4,046)	(	(4,930)	(	(3,829)
Short-term borrowings, net		(775)		(394)		377		(775)		(394)		377
Financing costs, net		(391)		199		(12)		(391)		199		(12)
Congressional appropriations		(57)		(60)		(61)		50		69		106
Payments to U.S. Treasury	_	(57)	_	(60)	_	<u>(61)</u>	_	(57)	_	(60)	_	(61)
Net cash used in financing activities	_	(763)	_	(560)	_	(425)	_	(713)	_	(491)	_	(319)
Net change in cash and cash equivalents Cash and cash equivalents at beginning of		(288)		92		61		(291)		77		56
period		391		299	_	238	_	451	_	374		318
Cash and Cash Equivalents at End of Period	\$	103	\$	391	\$	299	\$	160	\$	451	\$	374

#### **POWER PROGRAM**

## STATEMENTS OF CHANGES IN PROPRIETARY CAPITAL For the Years Ended September 30

	1999	1998	1997
		(in millions)	
Retained earnings reinvested at beginning of period	\$3,580	\$3,387	\$3,420
Net income	119	233	8
Return on appropriation investment	(37)	(40)	(41)
Retained Earnings Reinvested at End of Period	3,662	3,580	3,387
Appropriation investment at beginning of period	568	588	608
Return of appropriation investment	(20)	(20)	(20)
Appropriation investment at end of period	548	568	588
Proprietary Capital at End of Period	\$4,210	\$4,148	\$3,975

#### NONPOWER PROGRAMS

## STATEMENTS OF NET EXPENSE For the Years Ended September 30

	1999		1998		1997	
			(in m	illions)		
Water and Land Stewardship	\$	72	\$	65	\$	78
Land Between The Lakes (note 10)		19		8		7
Economic Development		5		8		22
Environmental Research Center		_		10		14
Net Expense	\$	96	\$	91	\$	121

#### NONPOWER PROGRAMS

## STATEMENTS OF CHANGES IN PROPRIETARY CAPITAL For the Years Ended September 30

	1999	1998	1997
		(in millions)	
Proprietary capital at beginning of period	\$908	\$ 930	\$ 944
Congressional appropriations	50	69	106
Net expense	(96)	(91)	(121)
Other, net	(2)		1
Proprietary Capital at End of Period	\$860	\$ 908	\$ 930

#### NOTES TO FINANCIAL STATEMENTS

## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### General

TVA is a wholly owned corporate agency and instrumentality of the United States. It was established by the TVA Act with the objective of developing the resources of the Tennessee Valley region in order to strengthen the regional and national economy and the national defense by providing: (1) an ample supply of power within the region, (2) navigable channels and flood control for the Tennessee River System, and (3) agricultural and industrial development and improved forestry in the region. TVA carries out these regional and national responsibilities in a service area that centers on Tennessee and parts of Alabama, Georgia, Kentucky, Mississippi, North Carolina and Virginia.

TVA's programs are divided into two types of activities — the power program and the nonpower programs. Substantially all TVA revenues and assets are attributable to the power program. The power program has historically been separate and distinct from the nonpower programs and is required to be self-supporting from power revenues and proceeds from the issuance of debt. The power program receives no congressional appropriations and is required to make annual payments to the United States Treasury (the "Treasury") in repayment of, and as a return on, the government's appropriation investment in TVA power facilities. Most of the funding for TVA's nonpower programs has historically been provided by congressional appropriations. Certain nonpower activities are also funded by various revenues and user fees. Financial accounts for the power and nonpower programs are kept separately. See note 10 for a discussion related to future funding of TVA's nonpower programs.

Power rates are established by the TVA Board of Directors as authorized by the TVA Act. The TVA Act requires TVA to charge rates for power that, among other things, will produce gross revenues sufficient to provide funds for operation, maintenance and administration of its power system; payments to states in lieu of taxes; and debt service on outstanding indebtedness.

#### Fiscal year

Unless otherwise indicated, years (1999, 1998, etc.) refer to TVA's fiscal years ended September 30.

#### Revenue

Revenues from power sales are recorded as power is delivered to customers. TVA accrues estimated unbilled revenues for power sales provided to customers for the period of time from the end of the billing cycle to month-end.

Off-system sales are presented in the accompanying statements of operations as a component of Sales of electricity — Federal agencies and other. Prior to 1998, off-system sales and purchases under exchange power agreements were reflected on a net basis in fuel and purchased power expense. Off-system sales for 1997 have been reclassified to conform with the 1999 and 1998 presentation.

#### Property, plant, and equipment and depreciation

Additions to plant are recorded at cost, which includes direct and indirect costs and an allowance for funds used during construction. The cost of current repairs and minor replacements is charged to operating expense. Nuclear fuel is valued at the lower of cost or market using the average cost method for raw materials and the specific identification method for nuclear fuel in reactor. Amortization of nuclear fuel is calculated on a units of production basis and is included in fuel expense. The TVA Act requires TVA's Board of Directors to allocate the cost of completed multi-purpose projects between the power and nonpower programs, subject to the approval of the President of the United States. The original cost of property retired, together with removal costs less salvage value, is charged to accumulated depreciation. Depreciation is generally computed on a straightline basis over the estimated service lives of the various classes of assets. Depreciation expense expressed as a percentage of the average annual depreciable completed plant was 3.28 percent for 1999, 3.23 percent for 1998 and 3.21 percent for 1997.

#### **Decommissioning costs**

Effective for 1998, TVA changed its method of accounting for decommissioning costs and related liabilities. TVA's current accounting policy recognizes as incurred all obligations related to closure and removal of its nuclear units. The charge to recognize the additional obligation in 1998 was effected through the creation of a regulatory asset. TVA further modified its accounting methodology such that earnings from decommissioning investments, amortization of the decommissioning regulatory asset and interest expense on the decommissioning liability are deferred (see note 9 — Decommissioning costs). The effect of the change was to decrease 1998 depreciation expense approximately \$38 million primarily due to the deferral of the decommissioning components of earnings, amortization and interest.

During 1997, the excess of decommissioning investment earnings over the annual decommissioning provision was recorded as other income. TVA's total investment earnings were \$151 million. Of this amount, \$13 million was recorded as an offset to the decommissioning provision and \$138 million was recorded as other income.

#### Allowance for funds used during construction

TVA capitalizes an allowance for funds used during construction. The allowance is applicable to construction in progress, excluding deferred nuclear generating units.

#### Loans and other long-term receivables

In June 1997, TVA entered into a five-year agreement with a bank pursuant to which TVA agreed to sell certain receivables relating to TVA's consumer energy-conservation programs. As of September 30, 1999, approximately \$218 million of the receivables have been sold for proceeds equal to their carrying amount. Under the terms of the agreement, TVA has retained substantially the same risk of credit loss as if the receivables had not been sold and, accordingly, an appropriate liability account has been established.

#### Other deferred charges

Other deferred charges primarily include prepaid pension costs and regulatory assets capitalized under the provisions of Statement of Financial Accounting Standards (SFAS) No. 71, Accounting for the Effects of Certain Types of Regulation. At September 30, 1999, other deferred charges included total unamortized regulatory assets of \$968 million — of which \$343 million represents a transition obligation for certain postemployment benefits; \$393 million represents an additional obligation related to the closure and removal of nuclear units (see note 1 - Decommissioning costs); \$221 million represents an overmarket portion of nuclear fuel and \$11 million represents TVA's portion of the costs for decommissioning the Department of Energy's (DOE) uranium enrichment facilities. At September 30, 1998, the unamortized balances of regulatory assets of \$1,260 million included \$342 million representing a capitalized interest component of nuclear fuel; \$377 million representing a transition obligation for certain postemployment benefits; \$478 million representing an additional obligation related to the closure and removal of nuclear units (see note 1 — Decommissioning costs) and \$63 million representing TVA's portion of the costs for decommissioning the DOE's uranium enrichment facilities.

Effective for 1999, TVA reclassified an additional \$332 million from nuclear fuel inventory to deferred charges. This regulatory asset will be amortized on a straight-line basis over an estimated three-year period. The effect of this change was to increase 1999 expense approximately \$111 million.

Also effective for 1999, TVA changed its method of accounting for nuclear refueling outage maintenance costs whereby such costs will be deferred and amortized on a straight-line basis over the estimated period until the next refueling outage, rather than expensed as incurred. The effect of the change was to decrease 1999 expense approximately \$63 million.

#### **Investment funds**

Investment funds consist primarily of trust funds designated to fund nuclear decommissioning

requirements (see note 9 — Decommissioning costs). These funds are invested in portfolios of securities generally designed to earn returns in line with overall equity market performance.

#### Debt issue and reacquisition costs

Effective for 1999, TVA changed its method of amortizing debt issue and reacquisition costs. Under the current policy, issue and reacquisition expenses, call premiums and other related costs are deferred and amortized (accreted), on a pooled straight-line basis over the weighted average life of TVA's public debt portfolio. During 1998 and 1997, debt issue and reacquisition costs were separately amortized on a straight-line basis over the term of the related outstanding securities. The effect of the change was to decrease 1999 expense approximately \$20 million.

TVA has incurred premiums related to certain advanced refundings and also received and paid premiums in connection with the monetization of certain call provisions. In accordance with regulatory practices, TVA has deferred these premiums and is amortizing such premiums on a pooled straight-line basis over the weighted average life of TVA's public debt portfolio. The unamortized balances of such regulatory assets at September 30, 1999 and 1998, were \$641 million and \$674 million, respectively.

#### Tax-equivalents

The TVA Act requires TVA to make payments to states and local governments where the power operations of the corporation are conducted. The amount is 5 percent of gross revenues from the prior year's sale of power, excluding sales to other Federal agencies and interchange sales with other utilities, with a provision for minimum payments under certain circumstances.

#### Accelerated amortization

Effective for 1999, TVA adopted a new accounting policy whereby annual provisions for amortization of deferred charges will be adjusted as necessary in order to achieve certain earnings levels as set forth in resolutions adopted annually by the TVA Board of Directors in connection with the rate review process. The targeted earnings

levels will be based on the earnings requirements of the TVA Act and the Basic TVA Power Bond Resolution (see note 5 — Borrowing authority). Such adjustments may result in either contracting or extending the estimated amortization periods. The amortization of such assets is principally computed on a straight-line basis, over periods ranging from three to 15 years. As a result of surplus earnings levels in 1999, due in part to a change in accounting for pension costs (see note 7 — Pension plan), TVA accelerated amortization of certain regulatory assets by \$261 million under the new policy in 1999.

#### Interest and capital costs

During 1999, 1998 and 1997, cash paid for interest on outstanding indebtedness (net of amount capitalized) was \$1,740 million, \$1,886 million and \$1,911 million, respectively. In addition to paying interest on outstanding indebtedness, the TVA Act requires TVA to make annual payments to the Treasury. The annual Treasury payments represent a repayment of the original appropriation investment, along with a return on the appropriation investment (see note 4). TVA paid \$20 million each year for 1999, 1998 and 1997 as a repayment of the appropriation investment. TVA paid \$37 million to the Treasury in 1999 as a return on the appropriation investment, while paying \$40 million in 1998 and \$41 million in 1997.

#### Risk-management activities

TVA is exposed to market risk from changes in interest rates and currency exchange rates. To manage volatility relating to these exposures, TVA has entered into various derivative transactions, principally an interest rate swap agreement and foreign currency swap agreements. TVA is exposed to credit losses in the event of nonperformance by counterparties on the risk-management instruments. TVA monitors such risk and does not believe that there is a significant risk of nonperformance by any of the parties to these instruments.

TVA may engage in hedging activities using forwards, futures or options to hedge the impact of market fluctuations on energy commodity prices. TVA currently accounts for these transactions

using the deferral method, and gains and losses are recognized in the accompanying financial statements when the related hedged transaction occurs. TVA's risk management policies allow the use of derivative financial instruments to manage financial exposures but prohibit the use of these instruments for speculative or trading purposes.

#### Cash and cash equivalents

Cash and cash equivalents include the cash available in commercial bank accounts and Treasury accounts, as well as short-term securities held for the primary purpose of general liquidity. Such securities mature within three months from the date of acquisition.

#### **Insurance**

TVA is primarily self-insured for property loss, workers' compensation, general liability and

automotive liability. TVA is also self-insured for health care claims for eligible active and retired employees. Consulting actuaries assist TVA in determining certain liabilities for self-insured claims. TVA maintains nuclear liability insurance and nuclear property, decommissioning and decontamination insurance with an outside party (see note 9 — Nuclear insurance).

#### Management estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the related amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

#### 2. NUCLEAR POWER PROGRAM

The nuclear power program at September 30, 1999, consisted of nine units — five operating, three deferred and one inoperative — at four locations, with investments in property, plant and equipment as follows and in the status indicated:

	Operating units	Installed capacity (megawatts)	Completed plant, net	Construction in progress	Deferred units	Fuel investment
			(dollars in m	illions)		
Browns Ferry*	2	2,304	\$ 3,167	\$ 45	\$ —	\$185
Sequoyah	2	2,442	1,989	35	_	102
Watts Bar	1	1,270	6,407	4	1,718	56
Bellefonte	_	_	_	_	4,602	_
Raw materials						29
Total	<u>5</u>	<u>6,016</u>	\$11,563	\$ 84	\$6,320	<u>\$372</u>

<sup>\*</sup> Browns Ferry 1, an inoperative unit, is discussed below.

Browns Ferry 1 was taken off-line in 1985 for modifications and improvements and will continue to remain in an inoperative status until its ultimate disposition is determined. The undepreciated cost of Browns Ferry 1 of \$66 million is included in net completed plant and is being depreciated as part of the recoverable cost of the plant over the remaining license period.

TVA has three units in deferred status. In 1988, TVA suspended construction activities on Watts Bar 2, and the unit is currently in lay-up. Bellefonte 1 and 2 were deferred in 1988 and

1985, respectively. Estimated 2000 expenditures for the three deferred units are limited to lay-up, maintenance and ensuring that options remain viable.

In December 1994, TVA determined it will not, by itself, complete Bellefonte 1 and 2 and Watts Bar 2 as nuclear units. TVA's integrated resource planning process identified as a viable option the conversion of the Bellefonte facility to a combined-cycle plant utilizing natural gas or gasified coal. In 1997, an independent team of technical and financial experts completed a feasi-

bility study to evaluate options for the conversion of the Bellefonte Nuclear Plant to a fossil fuel-fired plant. The feasibility study concluded that one of the most economical fossil conversion strategies is to complete Bellefonte as a natural gas-fired combined-cycle plant. TVA also issued an Environmental Impact Statement (EIS) assessing the environmental impacts of various fossil conversion options. The EIS identified the natural gas-fired combined-cycle plant alternative as the

preferred option. Bellefonte remains in a deferred status.

While the future decisions on TVA's deferred units will ultimately impact the method of cost recovery, the TVA Board has determined that it will establish rate adjustments and operating policies to ensure full recovery of the cost of these units and compliance with the requirements of the TVA Act.

#### 3. COMPLETED PLANT — POWER PROGRAM

Completed plant of the power program consisted of the following at September 30:

		1999			1998	
	Cost	Accumulated depreciation	Net	Cost	Accumulated depreciation	Net
			(in mi	llions)		
Fossil plants	\$ 7,983	\$3,407	\$ 4,576	\$ 7,780	\$3,181	\$ 4,599
Nuclear plants	14,705	3,142	11,563	14,613	2,697	11,916
Transmission	3,384	1,091	2,293	3,265	1,038	2,227
Hydro plants	1,486	514	972	1,424	491	933
Other	2,011	608	1,403	1,973	538	1,435
Total	\$29,569	\$8,762	\$20,807	\$29,055	\$7,945	\$21,110

## 4. APPROPRIATION INVESTMENT — POWER PROGRAM

The TVA Act requires TVA to make annual payments to the Treasury from net power proceeds as a return on the appropriation investment in the power system and as a repayment of that investment. The payments required by the TVA Act may be deferred under certain circumstances for not more than two years. The annual repayment amount is \$20 million. The return is based on the appropriation investment as of the beginning of the year and the computed average interest rate payable by the Treasury on its total marketable public obligations as of the same date (6.56 percent at September 30, 1998).

#### 5. DEBT

#### **Borrowing authority**

The TVA Act authorizes TVA to issue bonds, notes and other evidences of indebtedness up to a total of \$30 billion outstanding at any one time. TVA must meet certain cash flow and earnings tests that are contained in the TVA Act and the Basic TVA Power Bond Resolution. Debt service on these obligations, which is payable solely from TVA's net power proceeds, has precedence over the payment to the Treasury described in note 4.

#### **Debt outstanding**

Debt outstanding at September 30, 1999 and 1998 consisted of the following:

	1999	1998
	(in mil	llions)
Short-term debt		
Held by the public		
Discount notes (net of discount)	\$ 982	\$ 1,757
Current maturities of long-term debt — 8.375%	1,000	1,500
Total short-term debt	1,982	3,257
Long-term debt		
Held by the public — senior		
Maturing in 2000	_	1,250
Maturing in 2001 — 5.00% to 6.50%	2,350	2,100
Maturing in 2002 — 6.00%	1,000	_
Maturing in 2003 — 6.125%	1,250	1,250
Maturing in 2004 — 5.00%	400	_
Maturing in years 2005 through 2044 — 5.375% to 8.625%	18,294	14,527
Held by Federal Financing Bank — senior	_	3,200
Held by the public — subordinated		
Maturing in 2045 and 2046 — 7.50% to 8.00%	1,100	1,100
Total long-term debt	24,394	23,427
Unamortized discount and other adjustments	(491)	(407)
Net long-term debt	23,903	23,020
Total debt	\$25,885	\$26,277

#### Short-term debt

The weighted average rates applicable to short-term debt outstanding in the public market as of September 30, 1999 and 1998, were 5.30 percent and 5.54 percent, respectively. During 1999, 1998 and 1997, the maximum outstanding balance of short-term borrowings held by the public was (in millions) \$4,701, \$2,914 and \$3,962, respectively, and the average amounts (and weighted average interest rates) of such borrowings were approximately (in millions) \$1,945 (5.01 percent), \$2,234 (5.58 percent) and \$2,743 (5.47 percent), respectively.

#### Put and call options

Bond issues of \$9.0 billion held by the public are redeemable in whole or in part, at TVA's option, on call dates ranging from the present to July 2020 at call prices ranging from 100 percent to 106.7 percent of the principal amount. Additionally, TVA has bond issues of \$2.1 billion held by the public that are redeemable in whole or in

part at the option of the respective bondholders. One bond issue totaling \$500 million, which matures in July 2045, is redeemable in 2001 by the bondholders. A second issue totaling \$121 million, which matures in April 2036, is redeemable in 2006 at the option of the bondholders and a third issue totaling \$1.5 billion, which matures in April 2036, is redeemable in 2006 at the option of the bondholders. Each of these three issues is reported in the debt schedule with maturity dates corresponding to the earliest redeemable dates. A fourth issue totaling \$250 million, which matures in January 2018, includes a provision for a right of redemption upon the death of a beneficial owner in certain specified circumstances.

Additionally, TVA has two issues of Putable Automatic Rate Reset Securities (PARRS) outstanding. The bonds permit TVA, after a fixed-rate period of five years, to reset the coupon rate downward under certain market conditions. Investors have the option to redeem the bonds at par if and when the interest rate is reset. One PARRS

issue totals \$575 million, matures in June 2028 and has its first potential reset date in June 2003. The second issue of PARRS totals \$525 million, matures in May 2029 and has its first potential reset date in May 2004.

## Foreign currency transactions and interest rate swap

During 1996, TVA entered into a currency swap contract as a hedge for a foreign currency denominated debt transaction. TVA issued DM1.5 billion of bonds and swapped the cash flows for those of a U.S. dollar obligation of \$1 billion. TVA also entered into a currency swap contract during 1999 as a hedge for a Sterling denominated debt transaction and issued £200 million of bonds in that transaction. Any gains or losses on the debt instruments due to the foreign currency transactions are offset by losses or gains on the swap contracts. At September 30, 1999 and 1998, the currency transactions resulted in net deferred gains of \$182 million and \$102 million, respectively, which are included in the account "unamortized discount and other adjustments." The offsetting losses on the swap contracts are recorded as a deferred liability. If any loss/(gain) were to be incurred as a result of the early termination of a swap contract, any resulting charge/(income) would be amortized over the remaining life of the bond as a component of interest expense.

Additionally, in 1997, TVA issued \$300 million of inflation-indexed accreting principle bonds. The 10-year bonds have a fixed coupon rate that is paid on the inflation-adjusted principal amount. TVA hedged its inflation exposure under

the securities through a 10-year fixed interest rate swap agreement.

## 6. FAIR VALUE OF FINANCIAL INSTRUMENTS

TVA uses the methods and assumptions described below to estimate the fair values of each significant class of financial instrument.

#### Cash and cash equivalents and short-term debt

The carrying amount approximates fair value because of the short-term maturity of these instruments.

#### Investment funds

At September 30, 1999, these investments were classified as trading securities and carried at their fair value.

#### Loans and other long-term receivables

Fair values for these homogeneous categories of loans and receivables are estimated by determining the present value of future cash flows using a discount rate equal to lending rates for similar loans made to borrowers with similar credit ratings and for the same remaining maturities.

#### **Bonds**

Fair value of long-term debt traded in the public market is determined by multiplying the par value of the bonds by the quoted market price (asked price) nearest the balance sheet date.

The estimated values of TVA's financial instruments at September 30 are as follows:

		1999	1998				
	Carrying amou	unt Fair amount	Carrying amount	Fair amount			
		(in m	(in millions)				
Cash and cash equivalents	\$ 160	\$ 160	\$ 451	\$ 451			
Investment funds	731	731	578	578			
Loans and other long-term receivables	153	153	151	151			
Short-term debt	982	982	1,757	1,757			
Long-term debt, including current							
maturities	25,394	24,598	24,927	26,732			

The fair market value of the financial instruments held at September 30, 1999, may not be representative of the actual gains or losses that will be recorded when these instruments mature or if they are called or presented for early redemption.

#### 7. BENEFIT PLANS

#### Pension plan

TVA has a defined benefit plan for most fulltime employees that provides two benefit structures: the Original Benefit Structure and the Cash Balance Benefit Structure. The plan is controlled and administered by a legal entity separate from TVA, the TVA Retirement System (TVARS), which is governed by its own independent board of directors. The plan assets are primarily stocks and bonds. TVA contributes to the plan such amounts as are agreed upon between the TVA and the TVARS boards of directors, which in no event is less than the amount necessary on an actuarial basis to provide assets sufficient to meet obligations for benefits. No TVA contribution is legally required when the plan's assets are sufficient to meet its accrued liabilities, as determined by an independent outside actuary. This situation has existed for several years.

The pension benefit for a member participating in the Original Benefit Structure is based on the member's years of creditable service, average base pay for the highest three consecutive years and the pension rate for the member's age and years of service, less a Social Security offset.

The pension benefit for a member participating in the Cash Balance Benefit Structure is based on credits accumulated in the member's account and member's age. A member's account receives credits each pay period equal to 6.0 percent of his or her straight-time earnings. The account also

increases at an interest rate equal to the change in the Consumer Price Index (CPI) plus 3.0 percent, which amounted to 5.8 percent in 1998. During 1999, plan amendments were effected such that the rate may not be less than 6.0 percent nor more than 10.0 percent. The actual change in the CPI for 1999 was 1.6 percent, resulting in the minimum of 6.0 percent for 1999.

During 1998, plan amendments were effected such that certain pension benefits were enhanced, resulting in approximately \$590 million in additional pension plan benefit obligations.

During 1999, TVA changed its accounting policy for the method of determining the market-related value of pension assets, resulting in a one-time gain of approximately \$217 million. This gain is presented on the Statement of Income under the caption "Cumulative effect of change in accounting principle." This accounting change also had the effect of increasing 1999 pension income approximately \$64 million.

The discount rate used to determine the actuarial present value of the projected benefit obligation was 7.5 percent in 1999, 7.0 percent in 1998 and 8.0 percent in 1997. The assumed annual rates of increase in future compensation levels for 1999, 1998 and 1997 ranged from 3.3 to 8.3 percent. The expected long-term rate of return on plan assets was 11.0 percent for 1999, 1998 and 1997.

In 1998, the FASB issued SFAS No. 132, Employers' Disclosures About Pensions and Other

Postretirement Benefits. This statement modifies current financial statement disclosure requirements from those required under SFAS Nos. 87, 88 and 106. SFAS No. 132 requires additional information be disclosed regarding changes in the benefit obligation and fair value of plan assets, but does not change the existing measurement or recognition provisions under the aforementioned standards. SFAS No. 132 was effective for fiscal years beginning after December 15, 1997.

#### Other postretirement benefits

TVA has sponsored an unfunded postretirement plan that provides for non-vested contributions toward the cost of certain retirees' medical coverage. The plan generally has covered employees who, at retirement, are age 60 and older (or who are age 50 and have at least five years of service). TVA's contributions are a flat dollar amount based upon the participants' age and years of service and certain payments toward the plan costs.

In connection with the pension plan benefit amendments, TVA also effected other postretirement benefit plan amendments during 1998 such that certain TVA contributions to retiree health benefits were discontinued, resulting in approximately \$120 million in reduced other postretirement benefit obligations.

The annual assumed cost trend for covered benefits is 9.5 percent in 1999, decreasing by one-half percent per year until reaching 5.0 percent in 2008 and held constant thereafter. For 1998 and 1997, an annual trend rate of 10.0 percent and 10.5 percent, respectively, was assumed. The effect of the change in assumptions of the cost basis was not significant. Increasing/(reducing) the assumed health-care cost trend rates by one percent would increase/(reduce) the accumulated postretirement benefit obligation (APBO) as of

September 30, 1999, by \$12 million/(\$11 million) and the aggregated service and interest cost components of net periodic postretirement benefit cost for 1999 by \$1 million/(\$1 million).

The weighted average discount rate used in determining the APBO was 7.5 percent for 1999, 7.0 percent for 1998 and 8.0 percent for 1997. Any net unrecognized gain or loss resulting from experience different from that assumed or from changes in assumptions, and which is in excess of 10 percent of the APBO, is amortized over the average remaining service period of active plan participants.

#### Other postemployment benefits

Other postemployment benefits include workers' compensation provided to former or inactive employees, their beneficiaries and covered dependents for the period after employment but before retirement. Adoption of Statement of Financial Accounting Standards No. 112, Employers' Accounting for Postemployment Benefits (SFAS No. 112) in 1995 changed TVA's method of accounting practice from recognizing costs as benefits are paid to accruing the expected costs of providing these benefits. This resulted in recognition of an original transition obligation of approximately \$280 million. During 1996, TVA made adjustments to certain assumptions utilized in the determination of the obligation at September 30, 1996, which resulted in an increase in the original transition obligation of approximately \$194 million. In connection with the adoption of SFAS No. 112, and related approval by its Board of Directors, TVA recorded the transition obligation as a regulatory asset. The regulatory asset is being amortized over approximately 15 years, whereby the annual expense approximates the expense that would have been recorded on an as-paid basis.

The components of pension expense and other postretirement benefits expense for the years ended September 30 were:

		Pension Benefits			Other Postretirement Benefits	
		1999	199	98	1999	1998
		(in millions)				
Change in benefit obligation						
Benefit obligation at beginning of year		\$5,645	\$4,2	209	\$206	\$348
Service cost		94		67	5	8
Interest cost		374	_	328	14	26
Plan participants' contributions		34		33		
Amendments, including other events		(0.53		587	(48)	(145)
Actuarial (gain)/loss		(853	,	595	(3)	3
Net transfers to variable fund/401(k) plan		(1	-	(26)	_	
Expenses paid		(350		(3)	(22)	(24)
Benefits paid		(259	<u> </u>	<u>(45</u> )	(23)	(34)
Benefit obligation at end of year		\$5,031	\$5,6	<u>945</u>	\$151	\$206
Change in plan assets						
Fair value of plan assets at beginning of year		\$5,968		958	<b>\$</b> —	\$—
Adjustment to reconcile to system asset value		1.000		_	_	_
Actual return on plan assets		1,098		223	_	_
Plan participants' contributions		34		33		_
` ' <del>-</del>	Net transfers to variable fund/401(k) plan			(26) 27	23	34
Employer contributions		(3		(3)	23	34
Expenses paid		(259		244)	(23)	(34)
Fair value of plan assets at end of year		\$6,842			\$ <u></u>	<del>- (34</del> )
			=			
Funded status		\$1,811			\$(151)	\$(206)
Unrecognized net actuarial (gain)/loss		(1,540	,	572)	(70)	5
Unrecognized prior service cost		266		170	(70)	(25)
Prepaid (accrued) benefit cost		\$537	<u>\$2</u>	221	<u>\$(220)</u>	<u>\$(226)</u>
				Othe	er Postreti	irement
		ion Benefits		Benefits		
	1999	1998	1997	1999	1998	1997
		(in millions)				
Components of net periodic benefit cost	¢0.4	¢(7	¢70	ф <i>Е</i>	φo	¢12
Service cost	\$94	\$67	\$70	\$5 14		\$13
Interest cost Expected return on plan assets	374	328	308		26 n/a	
Amortization of prior service cost	(591) 24	(479)	(437)	n/a (2)		ı 11/a
Amortization of prior service cost	∠ <b>-</b> +	_	1	(2	, –	
Recognized net actuarial loss	_	_				4
Net periodic benefit cost	(99)	(84)	(57)	17	34	
Other events	(217)	111	(28)		(121	
Total benefits cost/(income)	\$(316)	\$27	\$(85)		\$(87	
Total benefits cost (income)	$\frac{\psi(J10)}{}$	ΨΔ1	Ψ(02)	Ψ1/	φίσι	, ΨΤ/

#### 8. MAJOR CUSTOMERS

One municipal customer accounts for approximately 9.1 percent of total power sales, and four other municipal customers account for an additional aggregate 17.7 percent of total power sales.

These five municipal customers purchase power from TVA under long-term contracts, which require 10 years' notice to terminate.

### 9. COMMITMENTS AND CONTINGENCIES

#### Leases

Certain property, plant and equipment are leased under agreements with terms ranging from one to 30 years. Most of the agreements include purchase options or renewal options that cover substantially all the economic lives of the properties. Obligations under capital lease agreements in effect at September 30, 1999, total \$36 million annually through 2004, and an aggregate of \$228 million thereafter, for a total commitment of \$408 million. Of this amount, \$220 million is interest.

#### Fuel purchase commitments

TVA has entered into approximately \$2.4 billion in long-term commitments ranging in terms of up to six years for the purchase of coal, and approximately \$195 million in long-term commitments ranging in terms of up to five years for the purchase of uranium.

#### **Contingencies**

Nuclear insurance. The Price-Anderson Act sets forth an indemnification and limitation of liability plan for the United States nuclear industry. All Nuclear Regulatory Commission (NRC) licensees, including TVA, maintain nuclear liability insurance in the amount of \$200 million for each plant with an operating license. The second level of financial protection required is the industry's retrospective assessment plan, using deferred premium charges. The maximum amount of the deferred premium for each nuclear incident is approximately \$88 million per reactor, but not more than \$10 million per reactor may be charged in any one year for each incident. TVA could be required to pay a maximum of \$528 million per nuclear incident on the basis of its six licensed

units, but it would have to pay no more than \$60 million per incident in any one year.

In accordance with NRC regulations, TVA carries property and decontamination insurance of \$1.06 billion at each licensed nuclear plant for the cost of stabilizing or shutting down a reactor after an accident. Some of this insurance may require the payment of retrospective premiums of up to a maximum of approximately \$21 million.

Clean air legislation. The Clean Air Act Amendments of 1990 require coal-fired generation units to reduce their sulfur dioxide and nitrogen oxide emissions in two phases in order to control acid rain. The Phase I compliance period commenced January 1, 1995, for sulfur dioxide and January 1, 1996, for nitrogen oxide, while the Phase II compliance period commences January 1, 2000. Based on the level of emissions, 26 of TVA's 59 operating coal-fired units are classified as Phase I units, with the remaining units being Phase II units. Compliance with these requirements has resulted in substantial expenditures for the reduction of emissions at TVA's coal-fired generating plants.

TVA's strategy for complying with the 1990 Amendments includes the use of scrubbers at two fossil units and the use of lower-sulfur coal at other fossil units to reduce sulfur dioxide. TVA has completed all planned scrubbers and is on schedule to complete the change-over to lower-sulfur coal.

Nitrogen oxide reductions are required for 19 of TVA's Phase I units. These reductions were achieved through the installation of low-nitrogen-oxide burners at 13 units. TVA is in compliance with all Phase I requirements and is currently installing nitrogen oxide reduction equipment on remaining units to bring TVA into compliance with Phase II nitrogen oxide emission requirements.

Expenditures related to the Clean Air projects during 1999 and 1998 were approximately \$77 million and \$64 million, respectively. TVA has already completed the actions necessary to achieve Phase I compliance for both sulfur dioxide and nitrogen oxide emissions, and TVA is proceeding to take actions to comply with Phase II

requirements that become effective in the year 2000 or after.

The total cost of compliance cannot reasonably be determined at this time because of the uncertainties surrounding emerging Environmental Protection Agency regulations, resultant compliance strategies, potential for development of new emission control technologies and future amendments to the legislation.

Hazardous substances. The release and cleanup of hazardous substances are regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CER-CLA). In a manner similar to many other industries and power systems, TVA has generated or used hazardous substances over the years. TVA has been identified as a potentially responsible party with respect to five off-site disposal areas. TVA's liability at these sites has not yet been determined. In addition, TVA is currently investigating one other TVA-owned site under a state statute similar to CERCLA. TVA may have cleanup responsibilities at this site by virtue of its control of the property. TVA's potential liabilities for its share of cleanup costs at all of these sites are uncertain but are not expected to have a significant impact on TVA's financial position or results of operations.

**Pending litigation.** TVA is a party to various civil lawsuits and claims that have arisen in the ordinary course of its business. Although the outcome of pending litigation cannot be predicted with any certainty, it is the opinion of TVA counsel that the ultimate outcome should not have a material adverse effect on TVA's financial position or results of operations.

Decommissioning costs. Provision for decommissioning costs of nuclear generating units is based on the estimated cost to dismantle and decontaminate the facilities to meet NRC criteria for license termination. The Financial Accounting Standards Board (FASB) has reached several tentative conclusions with respect to its project regarding the accounting for closure and removal of long-lived assets, including the decommissioning of nuclear generating units. Effective for 1998, TVA changed its method of accounting for decommissioning costs and related liabilities in

order to comply with certain of the FASB's tentative conclusions, as well as certain rate-setting actions. The FASB expects to issue an exposure draft in the first quarter of 2000; however, it is uncertain when a final statement will be issued and what impact it may ultimately have on TVA's financial position or results of operations.

TVA's current accounting policy recognizes as incurred all obligations related to closure and removal of its nuclear units. The liability for closure is measured as the present value of the estimated cash flows required to satisfy the related obligation and discounted at a determined riskfree rate of interest. The corresponding charge to recognize the additional obligation is effected through the creation of a regulatory asset. TVA further modified its method of accounting for decommissioning costs such that earnings from decommissioning fund investments, amortization expense of the decommissioning regulatory asset and interest expense on the decommissioning liability are deferred in accordance with SFAS No. 71, Accounting for the Effects of Certain Types of Regulation. At September 30, 1999, the present value of the estimated future decommissioning cost of \$882 million was included in other liabilities. The decommissioning cost estimates from a 1995 study are based on prompt dismantlement and removal of the plant from service. The actual decommissioning costs may vary from the estimates because of changes in the assumed dates of decommissioning, changes in regulatory requirements, changes in technology and changes in cost of labor, materials and equipment.

TVA maintains an investment trust fund to provide funding for the decommissioning of nuclear power plants. In May 1997, TVA sold the entire \$402 million equity index fund portfolio and transferred the proceeds to trust portfolios managed by independent money managers. During 1997, TVA recognized \$151 million of income related to the fund, which included an \$81 million gain on the sale of fund investments and \$70 million in net appreciation and interest income. As of September 30, 1999, the decommissioning trust fund investments totaled \$724 million and were invested in securities designed to achieve a return in line with overall equity market performance.

Effective November 23, 1998, the NRC amended its regulations regarding decommissioning funding. The regulations required TVA to provide financial assurance for decommissioning funding through the use of certain prescribed mechanisms such as the trust agreements entered into by TVA in May 1997. These new regulations did not have a material impact on TVA's financial position or results of operations.

Cost-based regulation. As a regulated entity, TVA is subject to the provisions of SFAS No. 71, Accounting for the Effects of Certain Types of Regulation. Accordingly, TVA records certain assets and liabilities that result from the effects of the ratemaking process that would not be recorded under generally accepted accounting principles for non-regulated entities. Currently, the electric utility industry is predominantly regulated on a basis designed to recover the cost of providing electric power to its customers. If costbased regulation were to be discontinued in the industry for any reason, profits could be reduced and utilities might be required to reduce their asset balances to reflect a market basis less than cost. Discontinuance of cost-based regulation would also require affected utilities to write off their associated regulatory assets. Such regulatory assets for TVA total approximately \$1.6 billion at September 30, 1999, along with approximately \$6.3 billion of deferred nuclear plants. Management cannot predict the potential impact, if any, of the change in the regulatory environment on TVA's future financial position and results of operations.

#### 10. NONPOWER PROGRAMS

TVA's nonpower programs provide various public services, including managing navigable river channels, providing flood control and overseeing certain recreation facilities. The nonpower programs encompass general stewardship of land, water and wildlife resources. TVA's nonpower programs also conduct certain research and development activities in pollution prevention and remediation.

Funding for the nonpower programs has historically been primarily provided through Fed-

eral appropriations. Certain nonpower program activities have also been funded by user fees and outside services revenues. During 1999, TVA received total Federal appropriations of approximately \$50 million, of which \$43 million was for essential stewardship activities and \$7 million was for TVA's Land Between The Lakes National Recreation Area (LBL). During 1998, TVA received total Federal appropriations of approximately \$70 million, of which \$60 million was for essential stewardship activities, \$7 million was for LBL and \$3 million was for TVA's Environmental Research Center. As discussed below, TVA will receive no Federal appropriations in 2000.

In October 1997, Congress passed legislation that directed TVA to fund essential stewardship activities related to its management of the Tennessee River system and TVA properties with power funds in the event that there were insufficient appropriations or other available funds to pay for such activities in any year. Congress did not provide any appropriations to TVA to fund such activities in 2000. Consequently, during 2000, TVA will pay for essential stewardship activities primarily with power revenues, with the remainder funded with user fees and other forms of revenues derived in connection with those activities. In addition, administrative jurisdiction over LBL was transferred to the Secretary of Agriculture effective October 1, 1999. TVA is responsible for certain transition costs associated with the transfer of LBL, estimated to be approximately \$10 million. This liability was recorded against available nonpower fund balances at September 30, 1999. TVA retains responsibility for management of the remaining nonpower assets and settlement of nonpower obligations.

The completed plant of the nonpower programs consists of multipurpose dams and other plant. At September 30, 1999, the net completed plant balances for multipurpose dams and other plant were \$692 million and \$112 million, respectively. At September 30, 1998, the net completed plant balances for multipurpose dams and other plant were \$698 million and \$115 million, respectively.

#### REPORT OF INDEPENDENT ACCOUNTANTS

#### To the Board of Directors of the Tennessee Valley Authority

In our opinion, the accompanying balance sheets (power program and all programs) and the related statements of income (power program), changes in proprietary capital (power program and nonpower programs), net expense (nonpower programs) and cash flows (power program and all programs) present fairly, in all material respects, the financial position of the power program and all programs of the Tennessee Valley Authority as of September 30, 1999 and 1998, the results of operations of the power program and nonpower programs and cash flows of the power program and all programs for each of the three years in the period ended September 30, 1999, in conformity with generally accepted accounting principles. These financial statements are the responsibility of the Tennessee Valley Authority's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with generally accepted auditing standards and Government Auditing Standards issued by the Comptroller General of the United States which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for the opinion expressed above.

In accordance with Government Auditing Standards, we have also issued a report, dated October 22, 1999, on our consideration of the Tennessee Valley Authority's internal controls over financial reporting and our tests of compliance with certain provisions of laws, regulations, contracts and grants.

As discussed in note 7 to the financial statements, TVA changed its method for determining the market-related value of pension assets in 1999.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP Knoxville, Tennessee October 22, 1999

#### REPORT OF MANAGEMENT

Management is responsible for the preparation, integrity and objectivity of the financial statements of the Tennessee Valley Authority as well as all other information contained in the annual report. The financial statements have been prepared in conformity with generally accepted accounting principles applied on a consistent basis and, in some cases, reflect amounts based on the best estimates and judgments of management, giving due consideration to materiality. Financial information contained in the annual report is consistent with that in the financial statements.

The Tennessee Valley Authority maintains an adequate system of internal controls to provide reasonable assurance that transactions are executed in accordance with management's authorization, that financial statements are prepared in accordance with generally accepted accounting principles, and that the assets of the corporation are properly safeguarded. The system of internal controls is documented, evaluated, and tested on a continuing basis. No internal control system can provide absolute assurance that errors and irregularities will not occur due to the inherent limitations of the effectiveness of internal controls; however, management strives to maintain a balance, recognizing that the cost of such a system should not exceed the benefits derived. No material internal control weaknesses have been reported to management.

PricewaterhouseCoopers LLP was engaged to audit the financial statements of the Tennessee Valley Authority and issue reports thereon. Its audits were conducted in accordance with generally accepted auditing standards. Such standards require a review of internal controls and an examination of selected transactions and other procedures sufficient to provide reasonable assurance that the financial statements neither are misleading nor contain material errors. The Report of Independent Accountants does not limit the responsibility of management for information contained in the financial statements and elsewhere in the annual report.

/s/ David N. Smith

David N. Smith Chief Financial Officer and Executive Vice President of Financial Services



Certain principles are essential to the protection of the public interest, most notably reliability of service, universal access, environmental responsibility and the promotion of economic development.



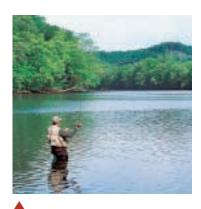
TVA's 17,000-mile system of transmission lines through seven states serves as a vital part of the United States energy infrastructure.



TVA is the nation's largest wholesale producer of electricity.



TVA's electric generation facilities include state of the art computer controlled production.



TVA is environmentally sensitive in managing the thousands of acres along the Tennessee River system.



The energy right® program was developed jointly by TVA and its customers to promote energy conservation through more efficient power use.



TVA manages the nation's fifth largest river system for flood control, navigation, power production and recreation.

#### PRINCIPAL EXECUTIVE OFFICE OF TVA 400 W. Summit Hill Drive Knoxville, TN 37902 U.S.A.

FISCAL AGENT
U.S. Federal Reserve Banks
c/o Federal Reserve Bank of New York
33 Liberty Street
New York, NY 10045
U.S.A.

U.S. TAX AND LEGAL ADVISORS TO TVA Orrick, Herrington & Sutcliffe LLP 666 Fifth Avenue New York, NY 10103 U.S.A. LEGAL COUNSEL FOR TVA
Maureen H. Dunn, Esq.
Executive Vice President and
General Counsel
Tennessee Valley Authority
400 W. Summit Hill Drive
Knoxville, TN 37902
U.S.A.

U.S. LEGAL ADVISORS TO THE MANAGERS
Sullivan & Cromwell
1701 Pennsylvania Avenue, N.W.
Washington, DC 20006
U.S.A.

LISTING AGENT AND SPECIAL AGENT Kredietbank S.A. Luxembourgeoise 43 Boulevard Royal L-2955 Luxembourg R.C. Luxembourg B6395 AUDITORS TO TVA
PricewaterhouseCoopers LLP
2030 Falling Water Road
Suite 280
Knoxville, TN 37922
U.S.A.